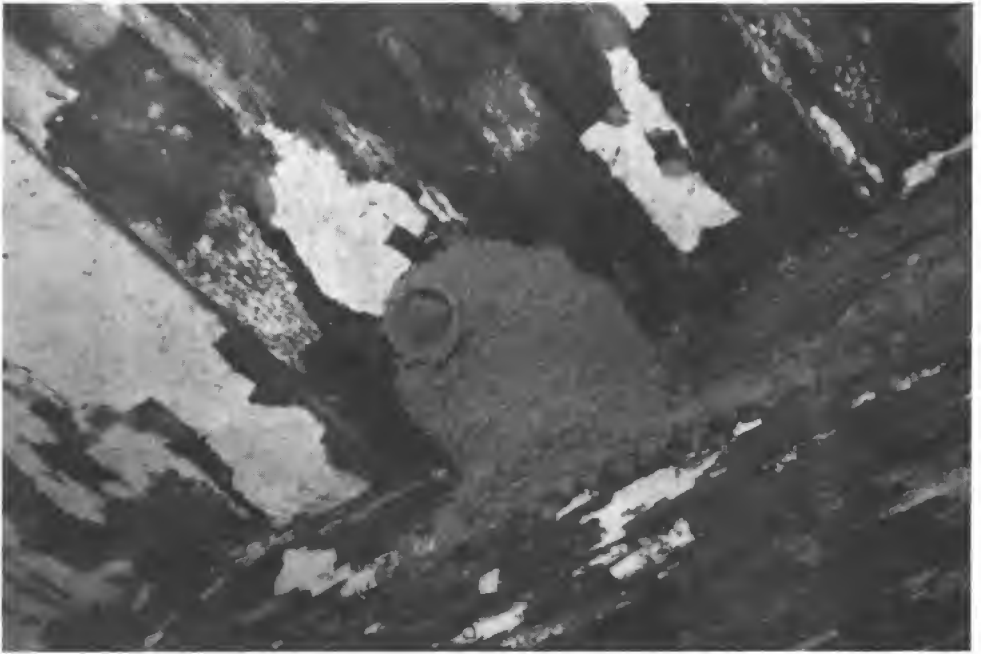


MARYLAND BIRDLIFE



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Cylburn Mansion, 4915 Greenspring Ave., Baltimore, Maryland 21209

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Cover: Nest of Cliff Swallow inside barn (see page 122).
Photo by Nancy D. Rowe.



COMMON GALLINULE BREEDING IN HOWARD COUNTY

Joanne K. Solem

On June 18, 1981, Paul Leifer discovered a nest with 8 eggs in edge vegetation in a pond within the harness racing track at the Laurel Raceway. He could not identify the species definitely, so he returned on June 21 with other individuals. The following observers stationed themselves along the north and east edge of the pond while Paul made his way to the nest: G. Gantt, D. Mignogno, R. Patterson, J. Solem, and H. Wierenga. Within a minute or two a Common Gallinule (*Gallinula chloropus*) emerged at the pond edge and alternately flew and walked until it reached the track. It walked across the track and stayed there until a horse and sulky exercising on the track frightened it over the guard rail and out of sight.

The nest still contained 8 eggs which were slightly warm. Their ground color was a creamy tan with purplish specks and blotches fairly evenly distributed. The eggs were a little more pointed at one end and were not arranged in any particular fashion in the nest. Robert Patterson measured each egg and found that they ranged from 4.7 x 3.2 cm to 5.0 x 3.1 cm. The nest was constructed of last year's Narrow-leaved Cattail (*Typha angustifolia*) leaves with some thin willow twigs (*Salix* sp.) in the base for support. The inside diameter of the circular nest was 16 cm with a maximum 6 cm depth. The height above water to the rim of the nest was 32 cm, and the compact mass of material measured about 15 cm in height. Duck Pondweed was floating nearby and the nest was surrounded by and anchored to Narrow-leaved Cattails.

Subsequent visits yielded the following information on hatching:

July 2 - 5:00 p.m. 8 eggs with cracks in 1 egg.

July 3 - 2 chicks in the nest and 4 eggs, one of which was pipped.

July 4 - 3 young in the water; 2 chicks in the nest (they subsequently climbed into the water); 3 eggs remained, 1 of which was pipped.

July 5 - noon. Paul saw no chicks, but heard several "plops" as of chicks dropping into the water. He observed 1 adult. The nest contained 2 eggs, 1 of which was pipped.

July 6 - 1 chick was still in the nest. The nest was empty of shells and eggs. One adult was in the area vocalizing.

The Laurel Raceway is located on U.S. Route 1 just north of Laurel, barely east of the Fall Line.

STATE-WIDE BIRD COUNT, MAY 5, 1979

David W. Holmes

'Tis the night before May Count
And all through the state
All the birders are wond'ring
Why they're up so late.

For while starting at dawn
Is accepted convention,
Owls, rails, and goatsuckers
Need prior attention.

Our maps are all ready.
Our check lists are set
We've cameras and film,
And boots for the wet.

Our books include Robbins,
Pough Waterbird Guides,
East Peterson, West,
European besides.

We have tapes and recorders,
Binoculars, scopes.
We have food and drink planned for
And wildly high hopes.

Meeting places are set.
We have land permissions.
Our organization
Defies description.

Clock's set for 3:30.
By midnight, we're dead.
Hoots, whistles, and squawks
Now fly through my head.

We wake up at 8!
The alarm didn't ring?
How could one forget
To turn on the ---- thing!

This bit of doggerel chronicles (with slight exaggeration--we actually were up by six) one party's efforts to begin the descent into the swamps for another May Count. May the final verse never apply to you! Apparently, other parties had a few more wits about them, as seven counties reported pre-dawn starting times. But, birding then was a mixed pleasure since weather reports ranged from "cold" to "rainy." Most reports mentioned a cool, clear, and breezy morning, becoming quite beautiful by afternoon when the birds go into hiding. A weak cold front had taken almost two full days to move through Maryland--finally leaving the state about dawn on May Count day so winds were not conducive to waves of spring migrants. If only it had been fall! However, the 339 birders did not seem to be discouraged. And the species total of 252 ties the previously reported high. The individual bird tally of 135,391 was average or below compared with number of party-hours in previous years. Birds were being counted somewhere in the state from 12:01 a.m. until 11:00 p.m. Could there be a good reason for the lack of activity during that final hour?

The county list totals need no explanation. If one has variety of habitat and enough observers, one compiles a big list (Dorchester County being the standard exception). No reports were submitted from Harford, Cecil, or Talbot Counties.

The commercials for future improvements are fairly simple this year. This count may be made useful only if the participants keep track of party-hours. Comparisons between numbers of birds in different years reflect both numbers of birds and amount of effort. The most significant work that can be done with May Count results deals with summer resident

species that arrive before the first of May. Very direct comparisons can be made from year to year and conclusions can be drawn when the amount of effort can be taken into account. The migrant comparisons are of interest in determining the progress of that year's passage, and if correlated with weather conditions over many years, to study weather effects. Statistically, other migrant comparisons are nearly impossible.

Table 1. Summary of Observers and Species by Counties

<u>County</u>	<u>No. of Obs.</u>	<u>Species</u>	<u>County</u>	<u>No. of Obs.</u>	<u>Species</u>
Baltimore	26	185	Howard	41	124
Kent	14	160	Queen Annes	3	123
Montgomery	67	158	Worcester	6	114
Prince Georges	18	157	Charles	8	111
Washington	27	155	Frederick	12	96
Anne Arundel	16	143	Wicomico	7	94
Caroline	39	136	St. Marys	2	86
Dorchester	2	135	Somerset	4	74
Garrett	21	130	Calvert	1	72
Allegany	23	124	Carroll	2	40

The other point that frustrated this year's compiler was the lack of details for unusual species. Charles Mullican in Frederick County and Henry Armistead in Dorchester County submitted complete descriptions of unusual birds seen on their respective counts. "Complete" means every thing the observer heard and saw: the viewing conditions, plumage characters, size, shape, any comparisons that could be made, and what the bird was doing when observed. This is not only appreciated; it is useful documentation of an out-of-the-ordinary occurrence. There was no question this time about the identification of any of the birds described; but there could be, and it is often helpful to be able to get additional opinions.

The compilers for Garrett, Allegany, Montgomery, and Prince Georges Counties included at least some notice that a bird was unusual. It is nice to know a bird was "well seen" and who saw it, but often this information does not answer enough questions. I have seen every birder I know make a mistake. The complete field notes produce confidence at both ends.

Some birds for which this compiler would have liked field details are: Red-necked Grebe, Greater Scaup, Cooper's Hawk (because they are hard), Northern Phalarope, Black-headed Gull, Least and Willow Flycatchers, Olive-sided Flycatcher, Philadelphia Vireo, Orange-crowned Warbler, Rusty Blackbird below the Piedmont, Pine Siskin, Fox and Lincoln's Sparrows. Tree Sparrow reports MUST BE ACCOMPANIED BY THE BIRD to be believed! (Photo OK.) Some year, one may actually be here, but this bird on a May Count needs additional verification.

From the birders' point of view, it was a nice May Count. The weather was mostly pleasant, birds were around although nowhere in

great numbers, and a few rarities were turned up. It was a very average migration when compared with other years; the most notable occurrence was the combination of lingerers (look at the duck list) and early birds, which combined beautifully for our high species total. Just for interest, look at which species were reported in numbers of fewer than ten and more than 1,000. No species trends present themselves in that listing, but it is fun--like the day itself. And next year? Maybe we will really get up at 3:30 as planned. It would be interesting to do it--once.

SUMMARY OF COVERAGE, BY COUNTIES

GARRETT COUNTY (Garr.) 21 observers. 5:30 a.m. to 10:30 p.m.
David, Hillel, and Seth Brandes, Marty Cook, Drew Ferrier, Charlotte and Dan Folk, Shiela Hughes, Annie and Grace Lichty, Bill and Nancy Nemith, Bill Pope, Fran Pope (compiler), Sallie Thayer, Bradley and Gary Yoder, Daisy, John, and Sam Yoder.

ALLEGANY (Alle.) 23 observers. 5:00 a.m. to 9:30 p.m.
Brian Bucy, William Devlin, John and Myrna Eiser, Carl and Doris Ferguson, Charlotte Folk, Florence Giffin, Ethel and Robert Hiegel, Jon Jansen, Gail Malamphy, Dorothea Malec (compiler), Marc Malec, Paul Nazelrod, James Paulus, John Pfeiffer, Ann and T. Paul Smith, Mary Twigg, James Wilkinson, John Willetts, and Harriet Williams.

WASHINGTON (Wash.) 27 observers.
Laura Arant, Genevieve Beck, Dan Boone, Mr. and Mrs. Buterbaugh, Ross and Mary Corderman, Don and Frances Cutchall, Barbara Dowell, Chuck Dupree, Steve Gniadek, Carl and Jeanette Hull, Robert and Mary Keedy, Cam and Norma Lewis, Dave Patterson, Dorothy Ridenour, Doris Ruthraff, Susan Sindt, Janet Sponaugle, Marlin and Bertie Thurmond, and one unknown observer.

FREDERICK (Fred.) 12 observers.
Norman Chamberlain, Howard and Phyllis Hodge, Carolyn and Kennedy Maize, William Meredith, Charles Mullican (compiler), John and Ruth Richards, William Shirey, Linda Smith, and David Wallace.

MONTGOMERY (Mont.) 67 observers. 5:00 a.m. to 8:40 p.m.
John Bazuin, Jr., Louise Berry, Chip Bonde, Larry Bonham, Rich Bray (compiler), Jeremy Browne, Bob and Ellen Caswell, Pixie Christy, Dick Cleveland, Alice and Paris Coleman, Don and Margaret Donnalld, Bill Eliot, Glen Funkhauser, Heather, Mary, Robert and Tony Fatcher, O. Jerome Glass, Gregory Gough, Delores Grant, Bob Hahn, Malcolm Hodgdon, Harry Hogan, Linda Hollenberg, Les Holtschlag, Marilyn Hopkins, Vince Jones, Stella Koch, Manuel Lerdau, Nancy and Stuart MacClintock, Jack Mahool, Louise Marsh, Donald and Mieke Mehlman, Helen Meleny, Ed Mirsky, Ann Mitchell, Harvey and Marion Mudd, Lola Oberman, Jo Osterhaus, Albert and Hattie Parks, Cynthia Penland, Ella Pfeiffer, Aline Pinkard, Irene Ritch, Cherly and Leslie Roslund, Cecile Roth, Nick Schliapin, Peter Steinbach, Jean Steinberg, Margaret Sickels, Wayne Sieck, Grace Sims, Jeff Smith, John Weske, Claudia Wilds, Jeannie Wilkins, Frank Witebsky, Ann Wonnscott, and Paul Woodward.

Table 2. Statewide Bird Count, May 5, 1979

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr.G	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Common Loon	15	1	1	-	1	1	-	5	1	1	-	-	3	3	2	-	3	-	-	-	37
Red-necked Grebe	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Horned Grebe	3	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	5
Pied-billed Grebe	1	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	4
Northern Gannet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	17
Double-cr. Cormorant	-	-	-	-	1	-	1	9	22	-	11	-	140	4	-	-	45	-	-	500+	733+
Great Blue Heron	-	-	1	2	4	2	-	27	19	19	55	-	2	30	11	21	27	2	5	1	228
Green Heron	4	5	17	4	19	8	-	35	9	17	1	1	3	5	7	6	14	3	13	10	181
Little Blue Heron	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Cattle Egret	-	-	-	-	-	-	-	-	3	-	3	7	2	3	4	3	4	6	15	6	56
Great Egret	-	-	-	-	-	-	-	-	1	-	1	-	1	1	-	-	23	-	-	3	30
Snowy Egret	-	-	-	-	-	-	-	-	2	-	-	-	2	-	1	-	20	-	11	10	47
Louisiana Heron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	1	4
Blk-cr. Night Heron	-	-	1	-	1	-	-	4	-	1	-	-	-	-	-	-	1	-	-	-	8
Yellow-cr. Nt. Heron	-	-	1	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	4
Least Bittern	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	3
American Bittern	-	-	-	2	1	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	6
Glossy Ibis	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-	1	7	12
Mute Swan	-	-	-	1	-	-	-	-	-	-	-	-	-	10	1	-	-	-	-	-	12
Whistling Swan	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	-	-	-	4
Canada Goose	2	-	21	4	20	27	-	16	1	130	11	-	-	352	18	1	75	-	19	15	712
Snow Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	2
Mallard	26	16	118	12	119	108	-	255	37	42	8	-	6	120	32	29	25	3	13	6	975
Am. Black Duck	-	-	4	-	11	-	-	8	9	11	1	-	4	8	15	8	35	9	2	2	127
Gadwall	-	-	-	-	-	-	-	3	-	8	-	-	-	-	-	-	7	-	-	-	18
Common Pintail	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Green-winged Teal	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	8	-	-	-	13
Blue-winged Teal	6	-	2	-	24	-	-	11	-	18	2	-	2	1	-	-	30	-	-	-	96
American Wigeon	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Wood Duck	31	51	132	9	100	12	-	82	17	39	5	-	-	6	-	21	4	1	-	1	511
Redhead	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Ring-necked Duck	-	4	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	6
Canvasback	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	3
Greater Scaup	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2
Lesser Scaup	14	1	1	-	-	-	-	6	-	1	-	-	-	-	-	-	-	-	-	-	23
Bufflehead	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	3
Oldsquaw	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
White-winged Scoter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Ruddy Duck	5	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	8
Common Merganser	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

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MARYLAND BIRDLIFE

Table 2 (cont.). Statewide Bird Count, May 5, 1979

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr.G	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Red-br. Merganser	-	-	1	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	4
Turkey Vulture	19	17	115	36	123	81	1	80	5	30	12	4	5	94	111	275	40	55	32	12	1149
Black Vulture	-	1	2	3	25	2	-	4	-	1	3	-	2	15	3	2	1	-	-	1	65
Sharp-shinned Hawk	-	2	3	2	1	1	1	8	4	2	1	-	-	1	1	2	1	-	-	-	30
Cooper's Hawk	2	-	3	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	8
Red-tailed Hawk	1	6	10	1	23	10	-	4	3	8	5	1	1	13	6	6	4	2	1	1	106
Red-shoulder. Hawk	1	-	2	10	33	31	-	15	15	14	3	1	-	1	1	2	-	-	-	-	129
Broad-winged Hawk	3	21	25	2	6	3	4	8	1	2	1	-	-	1	1	-	-	-	-	-	78
Golden Eagle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Bald Eagle	1	-	-	-	1	-	-	-	-	2	1	-	-	5	-	-	10	-	-	1	18
Northern Harrier	1	2	2	1	1	1	-	4	-	1	-	1	-	-	-	2	4	-	2	-	22
Osprey	1	7	7	7	17	2	1	18	11	7	12	1	10	23	21	6	35	2	5	9	202
Peregrine Falcon	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Merlin	-	-	-	-	1	-	-	1	-	-	-	1	-	2	-	-	-	-	-	1	6
American Kestrel	5	4	15	9	7	5	-	19	2	6	-	1	2	1	2	3	-	-	-	1	82
Ruffed Grouse	8	3	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Bobwhite	-	5	20	-	33	11	-	52	29	31	5	6	7	36	8	85	20	10	9	3	370
Ring-neck. Pheasant	-	-	25	12	6	17	-	49	1	-	-	-	-	-	-	-	-	-	-	-	110
Wild Turkey	3	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	6
King Rail	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	5	3	-	-	-	13
Clapper Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Virginia Rail	-	-	-	-	-	-	-	9	12	1	-	-	-	7	-	1	41	-	-	-	71
Sora	-	-	-	-	-	-	-	6	2	-	-	-	-	2	-	-	10	-	-	-	20
Black Rail	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	6	-	-	-	8
Common Gallinule	-	-	-	-	-	-	-	5	-	2	-	-	-	-	-	-	2	-	-	-	9
American Coot	2	-	-	-	-	-	-	1	2	4	-	-	1	-	-	-	-	-	-	-	10
Am. Oystercatcher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	15
Semipalmated Plover	-	-	-	-	-	-	-	-	1	6	-	-	-	52	-	1	5	18	-	1	84
Killdeer	27	18	75	11	9	24	-	61	6	12	5	-	1	4	9	20	2	2	10	2	298
Black-belly Plover	-	-	-	-	-	-	-	4	1	4	-	-	-	3	-	-	1	-	-	27	40
Ruddy Turnstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10
American Woodcock	-	1	11	-	2	2	-	36	8	4	3	1	-	12	6	-	13	-	-	-	99
Common Snipe	4	-	-	5	1	-	-	15	-	10	-	-	-	2	-	2	-	-	-	-	39
Whimbrel	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Upland Sandpiper	3	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	5
Spotted Sandpiper	28	13	38	6	62	39	-	115	28	61	9	-	1	4	2	8	1	6	15	5	441
Solitary Sandpiper	3	6	12	57	33	26	-	85	23	35	4	-	1	6	6	2	-	14	-	1	314
Willet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	4	-	182	216
Greater Yellowlegs	6	-	21	15	3	2	-	54	10	29	2	-	2	20	7	50	50	5	-	9	285
Lesser Yellowlegs	18	3	15	31	7	3	-	48	27	34	8	-	3	15	7	6	15	4	-	-	245

Table 2 (cont.). Statewide Bird Count, May 5, 1979

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr.C	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Purple Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	21
Pectoral Sandpiper	-	-	2	-	-	-	-	2	5	1	-	-	-	18	-	6	-	-	-	-	34
White-rumped Sandp.	-	1	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	8
Least Sandpiper	2	4	2	-	-	6	-	44	10	8	-	-	-	146	2	18	55	50	-	-	347
Dunlin	-	-	-	-	-	-	-	13	-	-	-	-	-	3	-	1	300	-	-	141	458
Short-b. Dowitcher	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	2	5
Semipalm Sandpiper	-	-	-	-	-	-	-	30	-	5	-	-	8	61	-	35	2	-	-	-	141
Sanderling	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	280	281
Northern Phalarope	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Gr. Blk-back. Gull	-	-	-	-	-	-	-	31	3	-	-	-	2	2	-	-	2	-	-	4	44
Herring Gull	-	-	-	-	1	-	-	2496	327	1	6	-	6	188	2	1	45	3	23	21	3120
Ring-billed Gull	90	87	2	-	3	-	-	3603	861	51	237	5	191	723	86	107	11	10	-	130	6197
Black-headed Gull	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Laughing Gull	-	-	-	-	-	-	-	230	631	-	24	9	150	266	729	1153	250	160	42	500	4144
Bonaparte's Gull	-	-	1	-	1	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	13
Forster's Tern	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	3
Common Tern	-	-	-	-	-	-	-	3	-	-	-	-	-	-	4	-	2	-	-	380	389
Little Tern	-	-	-	-	-	-	-	6	-	-	-	-	3	-	1	-	73	-	-	36	119
Royal Tern	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	2	7	-	9	21
Caspian Tern	2	-	-	-	-	-	-	65	2	-	-	-	-	-	-	-	-	-	-	-	69
Black Tern	2	-	1	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Black Skimmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	49
Rock Dove	8	84	400	53	230	315	10	2288	54	128	53	2	-	106	58	71	8	-	15	-	3883
Mourning Dove	21	46	330	74	343	270	4	336	118	111	43	9	24	79	30	136	40	20	14	4	2052
Yellow-bill. Cuckoo	-	-	2	1	19	5	-	19	14	14	3	-	2	2	7	16	13	4	2	2	125
Black-billed Cuckoo	-	-	-	-	8	5	-	-	-	2	-	-	-	-	-	-	-	-	-	1	16
Barn Owl	1	-	-	1	-	4	-	6	-	-	-	-	-	1	-	-	2	-	-	-	15
Screech Owl	2	1	5	-	1	-	-	-	-	-	-	-	-	8	4	1	1	-	-	-	23
Great Horned Owl	2	-	2	-	1	-	-	1	2	1	-	-	-	7	1	4	-	-	1	-	22
Barred Owl	2	-	9	-	10	4	-	3	2	5	3	-	-	5	3	8	2	-	-	-	56
Chuck-will's-widow	-	-	-	-	-	-	-	8	1	-	-	-	4	11	4	1	4	-	-	2	35
Whip-poor-will	-	6	4	-	8	8	-	10	1	4	1	-	2	2	1	17	2	-	-	1	67
Common Nighthawk	-	-	2	-	7	1	-	2	-	1	-	-	-	-	-	3	-	-	-	-	16
Chimney Swift	29	294	542	153	385	131	-	798	85	171	18	10	-	88	33	214	22	16	11	9	3009
Ruby-thr Hummingbd	1	1	4	4	11	9	-	2	1	1	-	1	-	7	2	6	3	-	3	-	56
Belted Kingfisher	5	4	18	9	12	7	-	11	1	4	2	-	-	1	1	7	-	3	-	1	86
Common Flicker	30	32	106	26	78	67	-	67	31	20	2	-	1	28	11	46	12	6	4	3	570
Pileated Woodpr	3	14	34	3	45	2	-	3	5	6	2	-	-	1	1	6	8	1	-	-	134
Red-bellied Woodpr	-	25	84	21	167	84	1	82	48	50	18	6	1	51	23	72	9	5	-	1	748
Red-headed Woodpr	2	3	9	-	20	-	-	3	-	1	-	-	-	1	-	-	2	-	-	-	41

Table 2 (cont.). Statewide Bird Count, May 5, 1979

Species	Carr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr.G	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Yellow-b. Sapsucker	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3
Hairy Woodpecker	10	7	9	1	16	10	-	15	7	1	1	2	-	10	1	7	2	-	-	-	99
Downy Woodpecker	25	30	68	16	103	48	1	69	19	28	3	2	1	31	13	38	1	3	-	1	500
Eastern Kingbird	2	3	59	8	66	24	-	67	17	24	7	-	1	20	14	38	32	4	4	5	395
Gt. Crested Flycat.	2	6	32	-	47	1	-	23	12	21	5	-	-	20	9	33	23	13	4	1	252
Eastern Phoebe	9	29	44	8	58	22	2	29	1	6	8	2	2	6	6	34	-	-	5	2	273
Acadian Flycatcher	-	-	-	-	13	2	-	1	1	1	2	-	-	1	-	6	-	1	-	-	28
Willow Flycatcher	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Least Flycatcher	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	3
Eastern Pewee	1	-	-	-	17	1	-	4	1	-	1	-	1	5	-	11	-	-	-	-	42
Olive-sided Fly.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Horned Lark	1	-	10	-	2	-	-	8	-	-	2	1	1	4	3	28	3	1	-	1	65
Tree Swallow	97	231	174	40	522	76	-	213	158	101	37	48	-	71	14	221	300	45	15	10	2373
Bank Swallow	12	1	82	-	50	10	-	273	190	22	-	8	8	14	90	37	100	5	-	-	902
Rough-wg. Swallow	15	49	122	29	364	29	13	127	49	17	1	-	-	27	5	37	-	5	-	-	889
Barn Swallow	255	394	744	103	1587	320	2	1137	460	582	198	34	58	380	214	437	475	136	95	228	7839
Cliff Swallow	19	9	26	-	11	8	16	277	5	3	-	-	-	-	-	1	1	-	-	-	376
Purple Martin	52	7	167	14	168	82	-	99	47	25	10	19	33	46	12	206	70	6	10	2	1075
Blue Jay	56	91	305	42	612	283	1	597	390	100	27	6	9	89	34	174	65	41	11	9	2942
Northern Raven	7	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
American Crow	216	160	336	168	585	318	14	568	249	123	135	13	31	64	101	174	65	41	44	3	3384
Fish Crow	-	2	30	11	32	7	-	58	22	18	7	1	12	-	20	20	12	21	1	36	310
Blk-cap. Chickadee	98	19	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157
Carolina Chickadee	-	-	60	14	221	108	3	193	75	87	18	3	5	44	16	163	20	18	4	3	1055
Tufted Titmouse	22	83	164	31	254	126	-	158	66	66	28	3	12	36	17	83	13	22	8	3	1195
White-br. Nuthatch	35	14	16	3	33	12	-	12	-	7	1	-	-	2	-	1	-	1	-	-	137
Red-breast. Nuthatch	3	-	6	-	2	1	-	3	-	-	-	-	-	2	-	3	-	-	-	-	20
Brown-headed Nut.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	2	2	7
Brown Creeper	5	2	2	-	1	-	-	1	-	1	-	-	-	-	-	1	-	-	-	-	13
House Wren	33	17	144	45	284	87	2	110	18	18	1	-	-	27	3	14	19	5	2	3	832
Bewick's Wren	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Carolina Wren	-	7	33	12	46	18	-	33	26	10	7	1	7	17	15	22	12	4	3	1	274
Marsh Wren	-	-	-	-	-	-	-	99	10	2	1	-	-	6	4	1	55	-	1	2	181
Northern Mockingbird	-	17	69	21	120	76	2	156	59	59	20	3	20	63	19	83	20	16	15	5	843
Gray Catbird	17	18	173	42	257	263	3	244	71	83	9	3	2	50	27	65	18	8	24	39	1416
Brown Thrasher	6	12	146	10	36	37	1	39	25	17	5	2	2	28	8	84	8	2	10	3	481
American Robin	363	318	728	157	404	286	5	637	195	128	43	19	27	231	49	324	100	79	35	43	4189
Wood Thrush	20	10	113	19	141	94	-	171	45	46	23	2	2	99	28	102	18	14	2	4	953
Hermit Thrush	-	-	1	-	1	1	-	3	1	-	-	-	-	-	-	-	-	-	-	-	7
Swainson's Thrush	-	-	1	-	6	-	-	4	3	1	-	1	-	-	-	-	-	-	-	-	16

Table 2 (cont.). Statewide Bird Count, May 5, 1979

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr.G	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Gray-cheeked Thrush	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2
Veery	3	1	1	-	18	3	-	10	4	2	-	-	2	-	-	-	-	-	-	2	46
Eastern Bluebird	21	15	88	32	33	41	1	44	1	38	12	1	2	7	-	7	-	-	-	-	343
Blue-gray Gnatcat.	29	73	191	17	440	112	-	164	46	33	20	-	1	69	8	24	8	8	3	-	1246
Golden-cr. Kinglet	1	-	3	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	7
Ruby-cr. Kinglet	28	14	23	4	8	5	-	9	4	7	-	-	-	2	1	-	-	-	-	-	105
Water Pipit	-	-	23	3	-	-	-	-	-	-	-	-	-	-	4	10	-	-	-	-	40
Cedar Waxwing	-	21	24	6	125	52	-	5	52	46	27	1	-	-	-	-	-	6	-	-	365
Loggerhead Shrike	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Starling	102	144	1000	125	866	462	10	2545	363	263	53	10	40	654	63	658	150	356	99	111	8074
White-eyed Vireo	1	4	14	6	120	59	3	102	87	54	25	6	1	69	13	51	25	18	14	12	684
Yellow-thr. Vireo	-	-	10	-	17	6	-	12	9	3	5	-	-	2	2	11	1	2	1	-	81
Solitary Vireo	15	10	-	11	-	-	2	2	2	1	-	-	-	8	1	1	1	1	-	-	53
Red-eyed Vireo	4	29	73	2	229	66	3	266	221	114	143	17	17	104	27	108	20	18	14	5	1480
Philadelphia Vireo	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2
Warbling Vireo	-	3	43	2	36	1	-	4	1	-	-	-	-	3	1	2	-	-	-	-	96
Blk-&-white Warbler	3	1	11	-	62	11	2	99	25	32	29	1	1	18	11	26	5	4	-	1	342
Prothonotary Warbler	-	3	6	-	18	-	-	1	9	8	8	-	2	5	3	24	3	8	3	-	101
Worm-eating Warbler	-	13	19	-	11	-	-	16	2	1	1	1	-	2	-	1	2	2	-	-	71
Golden-wing. Warbler	-	3	8	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	13
Blue-winged Warbler	-	-	3	-	22	15	1	17	4	11	2	-	-	3	-	1	1	-	-	-	80
Tennessee Warbler	1	1	3	-	4	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	12
Orange-crowned Warb.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Nashville Warbler	2	4	3	-	1	-	-	1	6	2	-	-	-	3	1	-	-	-	-	-	23
No. Parula Warbler	3	32	61	-	213	26	3	70	64	53	40	1	1	6	8	5	2	2	2	-	592
Yellow Warbler	29	34	25	3	39	24	-	106	11	29	10	-	1	47	1	5	12	5	11	1	393
Magnolia Warbler	1	8	1	-	-	-	-	1	-	1	1	-	-	3	-	-	-	1	-	-	17
Cape May Warbler	1	2	11	1	24	1	-	5	-	5	-	-	-	1	4	3	-	-	-	-	58
Blk-thr. Blue Warb.	8	-	9	-	34	1	-	9	3	-	-	-	-	1	-	1	-	-	-	-	66
Yellow-rumped Warb.	52	48	1140	59	1103	193	6	1183	258	250	51	1	2	226	211	67	50	41	-	9	4950
Blk-thr. Green Warb.	19	1	4	-	6	2	-	3	-	1	-	-	-	5	-	-	2	-	-	-	43
Cerulean Warbler	1	4	76	-	22	2	-	3	1	-	-	-	1	-	-	2	-	-	-	-	112
Blackburnian Warb.	4	-	3	1	1	1	-	4	-	2	-	-	-	-	-	-	-	-	-	-	16
Yellow-thrtd. Warb.	-	1	12	-	18	1	-	2	-	-	1	-	-	3	1	2	1	4	-	-	46
Chestnut-sided Warb.	-	1	-	-	7	-	-	8	-	3	-	-	-	5	1	-	-	-	-	-	25
Bay-breasted Warb.	-	-	2	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	5
Blackpoll Warbler	-	-	-	-	14	-	-	7	5	10	1	-	-	5	1	-	-	-	3	-	46
Pine Warbler	-	3	15	-	1	2	-	14	14	9	6	1	2	9	7	19	70	13	-	6	191
Prairie Warbler	2	2	39	-	36	34	-	42	40	22	24	-	1	14	2	6	10	-	9	2	285
Palm Warbler	-	-	4	-	-	2	-	1	2	-	-	-	-	-	1	-	-	-	-	-	10

Table 2 (cont.). Statewide Bird Count, May 5, 1979

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr-G	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Ovenbird	7	1	19	-	36	25	-	44	25	29	36	4	4	10	2	24	35	23	18	4	346
No. Waterthrush	5	4	13	-	27	-	-	11	6	3	-	-	-	1	-	2	-	-	-	-	72
La. Waterthrush	2	29	18	2	19	5	2	25	1	2	6	-	1	1	1	3	-	5	-	3	125
Kentucky Warbler	-	-	-	-	4	6	-	2	13	1	4	-	1	4	2	9	-	4	-	-	50
Common Yellowthroat	45	23	70	28	201	185	4	379	149	97	33	9	2	142	31	70	140	16	13	4	1641
Yellow-br. Chat	-	2	10	3	20	16	-	15	24	15	5	-	-	4	1	15	17	3	-	-	150
Hooded Warbler	2	2	-	-	2	13	-	3	52	8	9	3	-	-	-	-	-	4	-	-	98
Wilson's Warbler	-	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	3
Canada Warbler	-	-	-	-	-	-	-	1	1	1	-	-	-	1	-	-	-	-	-	-	4
American Redstart	4	25	110	5	91	32	1	74	46	48	1	2	-	3	1	1	1	1	4	2	452
House Sparrow	75	158	500	128	156	215	-	584	52	99	58	30	65	79	30	341	45	52	22	7	2686
Bobolink	22	11	28	-	514	98	-	1704	2140	92	1	25	-	-	20	320	3	-	-	-	4978
Eastern Meadowlark	64	12	68	13	23	23	-	43	8	10	6	3	8	14	1	31	30	1	1	1	360
Red-wing. Blackbird	483	86	600	151	414	219	-	1744	405	222	127	32	86	670	213	940	1000	55	84	135	7666
Orchard Oriole	-	2	11	2	11	3	-	9	4	7	1	1	-	9	5	37	30	4	7	1	144
Northern Oriole	4	12	108	9	60	9	1	35	4	3	5	-	-	9	8	32	1	-	-	1	301
Rusty Blackbird	1	5	1	-	5	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	15
Boat-tailed Grackle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	4	189	218
Common Grackle	294	289	1600	323	690	356	6	926	271	229	331	44	271	562	354	1055	1200	230	131	291	9453
Brown-head. Cowbird	126	103	220	29	237	80	-	226	46	29	41	29	10	52	14	75	40	15	4	85	1461
Scarlet Tanager	3	14	28	2	40	17	-	26	36	26	21	3	1	13	19	20	6	3	-	4	282
Summer Tanager	-	-	-	-	-	3	-	-	1	2	3	1	-	-	-	5	10	1	-	-	26
Northern Cardinal	41	112	360	63	499	350	12	408	213	102	42	17	5	133	44	196	55	24	23	11	2720
Rose-br. Grosbeak	20	4	19	-	68	3	-	15	3	2	1	-	-	2	1	3	1	-	-	5	147
Blue Grosbeak	-	-	11	1	2	-	-	4	8	3	-	1	-	4	5	22	12	2	-	-	75
Indigo Bunting	1	14	49	7	82	7	-	23	17	26	12	-	3	8	1	4	7	4	5	4	274
Evening Grosbeak	28	8	4	-	-	-	-	5	6	4	5	-	-	2	-	7	-	2	2	1	74
Purple Finch	28	61	245	12	88	6	-	59	-	2	-	-	-	3	1	5	-	-	-	1	511
House Finch	11	34	90	6	11	3	-	36	8	1	-	1	-	1	-	-	-	-	-	1	203
Pine Siskin	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
American Goldfinch	91	510	1300	268	1059	382	6	714	255	210	48	5	3	104	34	79	15	8	10	4	5105
Rufous-sided Towhee	103	44	200	10	155	124	3	223	57	43	19	4	6	35	27	66	35	11	9	23	1197
Savannah Sparrow	2	-	2	-	4	6	-	62	29	10	-	-	-	3	8	5	16	-	-	-	151
Grasshopper Sparrow	-	2	37	1	8	7	-	7	2	10	-	1	2	4	1	5	2	-	-	-	89
Henslow's Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	11
Sharp-tailed Spar.	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	5	-	-	-	7
Seaside Sparrow	-	-	-	-	-	-	-	5	6	-	-	-	-	-	-	-	50	-	-	-	61
Vesper Sparrow	9	1	28	1	-	1	-	22	-	1	-	-	-	3	2	2	-	-	-	-	70
Northern Junco	6	1	9	-	5	-	1	-	-	2	-	-	-	2	-	3	-	-	-	1	30
Chipping Sparrow	222	161	190	41	115	87	1	178	24	44	12	1	3	52	47	75	55	11	24	4	1347

Table 2 (cont.). Statewide Bird Count, May 5, 1979

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	AnAr	Pr.G	Char	Calv	St.M	Kent	QuAn	Caro	Dorc	Wico	Somr	Worc	TOTAL
Field Sparrow	43	18	107	35	93	47	-	54	22	13	5	-	-	19	6	13	5	-	2	1	483
White-crowned Spar.	4	5	34	4	7	1	-	1	-	-	-	1	2	7	1	6	-	-	-	-	73
White-throated Spar.	48	106	205	78	364	221	7	358	200	74	13	3	2	99	38	125	2	5	2	12	1962
Fox Sparrow	-	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3
Lincoln's Sparrow	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Swamp Sparrow	33	4	6	2	10	4	-	109	7	3	-	-	-	5	-	2	-	-	-	1	186
Song Sparrow	142	101	175	92	185	152	-	329	79	64	7	16	2	29	13	23	25	9	1	2	1446
Total Species	130	124	155	96	158	124	40	185	143	157	111	72	86	160	123	136	135	94	74	114	252
Total Individuals	4136		15619		16967		161		10189		2496		1390		3315		6158		1098		135391
		4758		2960		7515		30008		5330		517		7450		9621		1894		3818	
Party-hours: foot	44	42	65	21	194	97	2	60+	57	58	25	7	2	10	15	36	2	2	4	7	750
car	32	20	23	4	22	15	0	17+	10	7	13	?	12	30	12	42	20	14	5	2	300
boat										3											3
total	76	62	86	25	216	112	2	77+	67	68	38	7	17	40	27	78	22	16	9	10	1053
Party-miles: foot	29	42	42	23	156	70	2	38+	44	51	23	6	2	30	9	35	2	2	3	3+	612
car	313	92	312	75	231	122	0	193+	81+	160	221	?	150	315	149	460	199	83	51	57+	3264
boat										17											17
total	342	134	354	98	387	192	2	231+	125+	228	244	6	152	345	158	495	201	85	54	60+	3893
Starting Time	0530	0500			0500			0300	0430	0525	0400	0700	0600		0400		1201				1201
Ending Time	2230	2130			2040			2100	2130	2100	2005	1400	2200		2045		2200				2330
Total Observers	21	23	27	12	67	41	2	26	16	18	8	1	2	14	3	39	2	7	4	6	339

HOWARD (Howa.) 41 observers.

Marty Chestem, Eileen and John Clegg, Frances Ehlers, George and Mary Hall, Edith and Sarah Haviland, Pat Jackson, Alice and Terry Kretz, Anu, Marcia, and V. Krishnamoorthy, Betsy Lawrence, Paul Leifer, Clio and Jerry Leonard, Grazina and Mike McClure, Linda McDaniel, Sybil McKennon, Don Morris, Marjorie Mountjoy, Rosamond Munro, Frances Nahrgang, Dorothy Rauth, Shirley Reed, Frederic and Nan Rhineland, Chan and Jane Robbins, Evelyn Roberts, Jo Solem, Earl Strain, Joan Varga, Mark Wallace, Jack Whyte, Cathy and Leroy Williamson, and Paul Zucker.

CARROLL (Carr.) 2 observers.

Bob Jarboe and Robert Lyon.

BALTIMORE (Balt.) 26 observers. 3:00 a.m. to 9:00 p.m.

Tom Andres, Jeff Bickart, Warren Bielenberg, Rick Blom, Ed Boyd, John Cullom, Marion Glass, Bob Jarboe, Hank Kaestner, Peter Kaestner, Peter Knight, Robert Lyon, Paul Noell, Jim Orgain, Patsy Perlman, Mike Resch, Rob Ringle (co-compiler), John Robinson, Alan and Barbara Ross, Doug Santoni, Steve Sapperstein, Steve Simon, Jim Stasz, Charles Swift, and Peter Webb. David Holmes (co-compiler).

ANNE ARUNDEL (AnAr.) 16 observers. 4:30 a.m. to 9:30 p.m.

Ann and Bill Anderson, Danny Bystrak, Barry Cooper, P. A. DuMont, Ellen Gizarelli, Paul Leifer, Kirk King, John Maloney, Ben Pagac, Linda Pivacek, William Sladen, Sarah Symington, B. Tappan, Hal Wierenga, F. Wilbur. Compiled by David Holmes.

PRINCE GEORGES (Pr.G.) 18 observers. 5:25 a.m. to 9:00 p.m.

Becky and Stan Anderson, Sam Droege, Bruce Fitch, Gary Hensler, Ed Kimmer, Elwood Martin, Betty and Bruce Newman, Jim Nichols, Paul Nistico, Robert Patterson (compiler), Ron Patterson, George Powell, Chan and Eleanor Robbins, Mike Sorensen, and Charles Williams.

CHARLES (Char.) 8 observers. 4:00 a.m. to 8:05 p.m.

Fred and Karen Burggraf, Keith Linville, Paul Nistico, Chris Oates, Olive Sorzano, Andrew Wilmot, and George Wilmot (compiler).

CALVERT (Calv.) 1 observer. 7:00 a.m. to 2:00 p.m. John Fales.**ST. MARYS (St.M.) 2 observers. 6:00 a.m. to 10:00 p.m.**

Alden and V. Ray Taylor.

KENT (Kent) 14 observers.

Joe and Margaret Blair, Frank Deerker, Arlene Delario, Maggie Duncan, Jim Gruber, Bud Hudson, Charles Humphreys, Kritz Keer, Dale Lowery, Dorothy and Ed Mendenhall, Floyd Parks (compiler), Pat Wilson.

QUEEN ANNES (QuAn.) 3 observers. 4:00 a.m. to 8:45 p.m.

David Holmes (compiler), Clark Jeschke, Lee McCollough.

CAROLINE (Caro.) 39 observers.

Annabelle, Elsie, and Irene Bilbrough, Margarethe Butenschoen, Elizabeth


Cannon, Kristi Cliff, Elsie Collison, Ethel and Wilber Engle, A. J., Roberta, and Robin Fletcher, Donna, Inez, and Joe Glime, Marvin Hewitt, Anna Jones, Alicia Knotts, Carmen and Roberta Leggett, Kathleen and Kathy Ann McKee, Mariana Nuttle, Douglas Pyle, Rick Radis, Brian Rafferty, Wilbur Rittenhouse, Elaine and Thomas Robbins, Carlene Schmick, Carol and Joan Scudder, L. T. Short, Christian Snyder, Isabel Todd, V. Edwin Unger, Steve Westre, Irene Wheatley, and David Williams.

DORCHESTER (Dorc.) 2 observers. 12:01 a.m. to 10:00 p.m.
Henry T. Armistead (compiler), Edward W. Marshall III.

WICOMICO (Wico.) 7 observers.
Maurice and Meriom Davis, Hugh and Sally Hanson, Charles Vaughn (compiler), Gail and Daphne Vaughn.

SOMERSET (Somr.) 4 observers.
Polly Batchelder, Ralph and Laura French, Martha Simpkins. Compiled by Charles Vaughn.

WORCESTER (Worc.) 6 observers.
Peggy Bohanan, Hugh Hanson, Mary Humphreys, Charles Vaughn, Ann and Richard Wilder.



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NORTHERN HARRIER NEST IN DORCHESTER COUNTY, 1981

Hal Wierenga

On June 6, 1981, while at the Elliott Island marshes in Dorchester County, Maryland, I observed a pair of Northern Harriers (*Circus cyaneus*) repeatedly depositing small loads of grasses or reeds at the same spot in a seemingly endless expanse of tidal marsh. The site was about six miles southwest of Henrys Crossroads, about one-half mile southwest of Savannah Lake, and about one-quarter mile west of the road from Vienna to Elliott. The marsh was principally a broad monotonous stand of needlerush (*Juncus roemerianus*) with a thin understory of Salt Meadow Cordgrass (*Spartina patens*) and Spike Grass (*Distichlis spicata*) and a few small, scattered patches of open water.

On June 12, I again saw the adult female performing there in a similar fashion, but this time she appeared to be mixing a few rodents in with her loads of grasses. I returned on June 14 to look more closely, and after a two-hour search, I found the nest, which contained four large chicks ranging from about 3 weeks to at least 4 weeks in age.

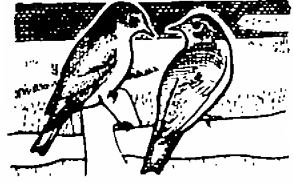
The nest was located atop an old flattened muskrat house and was well covered with freshly deposited vegetation. The nest mound was about 1½ feet high in the center of a clearing about 5 feet square. Radiating out from the clearing were four well-formed trails about 10 inches wide and leading out about 3 feet into and under the adjacent vegetation. Each of the chicks was found hiding at the end of one of these tunnels, beautifully shaded and camouflaged under the marsh vegetation.

I was fortunate enough to discover the first chick from about 10 feet away, so I proceeded to slowly circle the site without getting any closer in hopes of minimizing my disturbance and not leaving a scent trail for predators to follow directly to the nest. From that distance, the youngest chick appeared to be still mostly downy, although its emerging flight feathers were conspicuous on its wings. Plumage development was graduated up to the oldest bird, which was well feathered throughout with just a trace of down on its crown and back. The nest was not revisited, so the final fledging success was undetermined.

During my visit to the nest, I was not threatened by any aggressive actions by either parent bird. The female circled placidly the whole time, never closer than about 50 yards. The male called frequently and dive-bombed a passing Bald Eagle, an Osprey, and several Turkey Vultures, but not me. And he was at all times at least a quarter of a mile away.

On June 7 and June 12, I also observed a pair of harriers carrying grass near the Deal Island Wildlife Management Area in Somerset County, where a nest with eggs and young was found in 1980, also in a predominantly needlerush marsh. This indicated that perhaps harriers were nesting again near Deal Island in 1981.

1216 Tyler Avenue, Annapolis, Maryland 21403



THE SEASON

SPRING MIGRATION, MARCH 1 - MAY 31, 1981

Robert F. Ringler

Temperatures were inconsistent this spring, with variations from the norm of -1.6° , $+3.2^{\circ}$, and -1.7° for March, April, and May respectively. The April heat wave (88° in Rockville on the 28th) produced some unusually early arrivals, but frequent rainfall often made birding difficult. March was two inches below normal for precipitation, but April had $+3\frac{3}{4}$ inch and May $+1$ inch. Persistent easterly winds may have contributed to the generally lackluster passerine migration by moving the birds west of their regular paths.

The last substantial snowfall was on March 21 in the mountains, while the remainder of the State received only traces. Even on the Allegheny Plateau all snow had melted by the end of the month leaving food supplies readily available for all species.

Many thanks again go to all the contributors who made these reports possible:

Garrett - Fran Pope, Sallie Thayer.

Allegany - Chris Ludwig, Jim Paulus, Jim Wilkinson.

Washington - Dan Boone, Barbara Dowell, Leontine & Truman Doyle, Robert Keedy, Alice Mallonee, Dinnie & Harold Winger.

Frederick - David Wallace.

Carroll - Rick Blom, Betsy Reeder.

Baltimore - Warren Bielenberg, Peggy Bohanan, Bob Dixon, Hank Kaestner, Eddie Slaughter, Jim Stasz.

Harford - Barbara Bilsborough, Dennis Kirkwood.

Howard - Brenda & Michael Bell, Jon Boone, Russell Chandler, George Chase, Martha Chestem, Fred Cowden, Chuck Dupree, Georgia Eacker, Jane Farrell, Kris Krishnamoorthy, Anne Llewellyn, Grazina & Mike McClure, Helen Miller, Rosamond Munro, Fran Nahrgang, Nan Rhinelander, Tom Sauer, Jo Solem, Earl Strain, Eva Sunell, Mark Wallace.

Montgomery - Larry Bonham, Margaret Donnalld, Mieke Mehlman, John, Michael, & Paul O'Brien, Bob Warfield, Erika Wilson.

Prince Georges - Ric Conn, Bill & Floyd Hayes, Paul Leifer, Woody Martin, Bob Patterson, Chan Robbins, Danny Bystrak.

Anne Arundel - Alex & Helene Hammer, Wayne Klockner, Dotty Mumford, Hal Wierenga.

Charles - Paul Nistico, Olive Sorzano, Andrew & George Wilmot.

Calvert - Walt Kraus.

St. Marys - Jim Clark, Ernie Willoughby.

Kent - Jimmy Gruber, Floyd Parks.

Caroline - Catherine Adams, Ethel & Wilber Engle, Krystal Eckert, A. J. & Roberta Fletcher, Inez Glime, Marvin Hewitt, Alicia Knotts, Kathleen McKee, Mariana Nuttle, Ken O'Brian, J. Powell, Wilbur Rittenhouse, Christian Snyder, Walter Steward, Steve Westre.

Talbot - Terry Allen, Ed & Ester Burns, Lester Coble, Jeff & Lauren Effinger, Dick Kleen, Aron Marshall, Donald Meritt, Jan Reese, Kathy Trever.

Lower Eastern Shore - Henry Armistead, Carl Perry, Charlie Vaughn.

Loons, Grebes. Twelve Common Loons were on Deep Creek Lake, Mar. 27 (Pope). At Ft. Smallwood Wierenga and Blom counted 620 Common Loons for the season with peak days of 123 on Apr. 18 and 120 on Apr. 28. A Red-throated Loon was at Masonville in Baltimore City, Apr. 4-7 (Ringler, et al.), another at North Beach-Fairhaven, Apr. 20 (Kraus), and one on Triadelphia Reservoir, Apr. 26 (M. Wallace). A Red-necked Grebe was at Ocean City, Mar. 8-21 (J. B. Bazuin, et al.). A pair of Eared Grebes at Masonville, Apr. 4-15 (Blom, et al.) will be reported separately. A Pied-billed Grebe was found in a yard in Hagerstown and released on Big Beaver Creek (Doyle).

Tubenoses, Cormorants, Anhinga. Pelagic birders counted 6 Sooty Shearwaters and 200 Wilson's Storm Petrels off Ocean City on May 16. A Great Cormorant at Martinak State Park, Mar. 7-14 (Slaughter, et al.), will be reported separately. Reports of Double-crested Cormorants were varied and interesting. Wierenga noted the first migrant at Ft. Smallwood, Mar. 2, and 15 there on May 12. Also on the bay were 3 at Patuxent Naval Air Station, Mar. 27 (Clark), 50 at Deal Island, Mar. 29 (Armistead, Perry, Ringler), and 160 near Bellevue, Apr. 4, and 210 there on Apr. 21 (Armistead). At Pt. Lookout on Apr. 5 John Gregoire estimated 2,000 cormorants and Jack Abbott estimated 3,000 at Heron Island Bar, also in St. Marys County, on the 7th. This is a well-known staging area for cormorants in spring migration. Other sightings were 40 in Kent County, Apr. 8 (Parks), 700 at Denton, Apr. 15 (Westre), 1 on Broadford Reservoir, Garrett Co., Apr. 15, and 4 there on May 2 (Pope), 1 at Edwards Ferry, Montgomery Co., May 2 (Bonham), 23 in Charles County, May 3 (Wilmot, et al.), 21 at Sandy Pt., May 11 (Wierenga), 36 at Carroll Island, Baltimore Co., May 16, and 15 there on May 29 (Ringler, Blom). An Anhinga at Ft. Smallwood on May 9 (Blom, Orgain) will be reported separately.

Hérons. Based on an aerial survey, estimated pairs of breeding Great Blue Herons were 300 at Nanjemoy Creek, Charles Co., 200 at Bluff Pt., St. Marys Co., and 50 on the Patuxent River (Abbott). Armistead, Perry, and Ringler counted 77 Great Blue Heron nests on Bloodsworth Island, Mar. 28, and 22 at Deal Island Wildlife Management Area, Mar. 29. Reese reported that the colony on Poplar Island is down to 50-70 pairs as a result of erosion. Martin noted three other nests in Anne Arundel County near Bowie. An early Green Heron was at Back River, Apr. 4 (Ringler). Migrant Little Blue Herons were seen at Ft. Smallwood, Apr. 16 (2), Apr. 29 (4), and one each on May 12 and 25 (Wierenga). Other Little

Blues of note were at Bozman, Talbot Co. on May 2 (Kleen, et al.) and 2 flying over Nistico's house in Bryans Road, Charles Co., May 15. The earliest reports of Cattle Egrets were 3 in Kent Co., Apr. 1 (Parks), 1 at Patuxent NAS, Apr. 2 (Clark), and at Glencoe, Apr. 4 (Kaestner). Others of note were 17 at Sandy Pt. on Apr. 20 (Wierenga), 1 at Tanyard on Apr. 22 (E. Engle), 3 at Edwards Ferry on May 2 (Bonham), 12 at Lake Elkhorn near Columbia on May 11 (Sunell), 3 in the Belfast Valley of northern Baltimore County, May 14 (Kaestner), and 1 to 3 on various dates from Apr. 18 to May 31 near Stevenson (Stasz, Dixon, et al.). A Great Egret was at Patuxent NAS on Mar. 27 (Clark), 2 at Ft. Smallwood on Apr. 1 (Wierenga), 1 at Masonville on Apr. 4 (Ringler), 1 at Preston on Apr. 12 (E. Engle), 4 at Denton on Apr. 28 (Nuttall), and 1 at Germantown on Apr. 30 (Warfield). A Snowy Egret was at Ft. Smallwood on Mar. 29 as were single Louisiana Herons on Apr. 11 and 29 (Wierenga). The first Yellow-crowned Night Heron was reported from Sycamore Landing on the Potomac, Mar. 28 (Hayes'). Leifer and Bob Patterson sighted a Least Bittern near Laurel on May 18, only the second Howard County record. Six American Bitterns were at Deal Island WMA, Mar. 29 (Armistead, et al.), and one near Upper Marlboro on May 12 (Conn) was quite late for a migrant.

Ibises. Glossy Ibis were widely reported away from the coast this spring beginning with 2 very early birds at Masonville, Mar. 21 (Ringler, et al.). Others were 2 at Patuxent NAS, Apr. 17 (Clark), 8 at Sandy Pt., Apr. 23 (Wierenga), 3 at Piney Run Park, Carroll Co., Apr. 30 (Reeder), 1 at Loch Raven, Apr. 29 to May 6 (Dixon, et al.), 3 at Black Marsh, May 10 (Kaestner); and at Ft. Smallwood there were 22 on May 7, 2 on the 12th, and 24 on the 14th (Wierenga). An adult White Ibis was seen at Ocean City on Apr. 4 by Kathy Klimkiewicz and B. C. Leverman. This is the first record of an adult in the State.

Swans, Geese. Mar. 22 was a major migration day for Whistling Swans as 161 were seen on Rocky Gap Lake in Allegany County (Paulus) and 400 were flying over Piney Run (Ringler, et al.). Canada Geese showing further signs of breeding in the State were 2 pairs seen courting at the north end of Loch Raven, May 9 (Stasz), a pair with 6 downy young on Graves Run near Prettyboy Reservoir, May 13 (Haven Kolb), and 4 at the Piscataway Wastewater Treatment Plant, May 25 (Nistico). On May 1 there were 27 Brant at the Ocean City Inlet (Ringler). On May 8 Woody Martin observed a Barnacle Goose as it circled twice over the ponds at Patuxent WRC, called, then flew out of sight. All records of this species in the State are presumed escapes. On Mar. 25 there were 2,000 Snow Geese in the Denton area including 25 "Blues" (R. Fletcher). One hundred Snow Geese remained in Caroline County near Greensboro on Apr. 15 (Steward).

Dabbling Ducks. At Deal Island WMA on Mar. 29 an impressive 390 Gadwall were seen by Armistead, et al. At the same location Reese and Meritt found 3 Northern Pintails on May 6 and estimated 135 Blue-winged Teal. The latter number was eclipsed by the 150 Blue-wings in the Elliott Island area on Apr. 14 (Klockner). Armistead and friends counted 121 Green-winged Teal in southern Dorchester County on May 2, rather late for such a large number. The Cinnamon Teal at Blackwater that was seen by many remained at least to Mar. 22. Wilson reported 75

Species	Median		Table 1. Spring Arrival Dates, 1981																			
	10-yr	1981	Garr	Alle	Wash	Fred	Carr	Balt	Harf	Hova	Mont	Pr.C	AnAr	Char	Calv	St.M	Kent	Caro	Talb	Dorc	LES	
Common Loon	4/12	4/12	3/27	4/15		0	4/12	4/20	--	--	4/21	4/18	3/26	4/12	--	--	4/16	0	3/29	3/28	3/29S	
Horned Grebe	3/15	3/21	0	0	--	0	0	3/21	0	3/27	3/21	0	3/16	3/28	2/28	2/ 8	0	0	--	--	3/28	
Pied-billed Grebe	3/18	3/11	3/11	--	3/17	0	3/ 3	3/31	0	2/26	2/28	0	3/25	0	3/14	0	3/10	2/26	--	0	3/29S	
Double-cr. Cormorant	4/14	4/ 4	4/15	0	--	0	0	4/23	0	--	--	0	3/21	--	0	3/27	4/ 8	4/15	4/ 4	3/19	3/29S	
Great Blue Heron	3/18	3/15	4/ 4	--	2/ 8	3/ 8	--	--	--	4/ 1	3/29	--	3/13	3/ 2	3/15	--	--	--	--	3/25	--	
Green Heron	4/18	4/15	5/ 2	--	5/ 1	4/11	4/20	4/ 4	4/12	4/10	4/16	4/20	4/ 9	4/15	--	4/11	5/ 2	4/22	4/19	--	--	
Little Blue Heron	4/27	4/24	0	0	0	0	0	4/24	0	0	0	0	4/16	5/15	0	0	0	0	5/ 2	0	4/ 5	
Cattle Egret	4/10	4/23	0	0	0	5/ 2	--	4/ 4	0	5/ 2	5/ 2	5/ 2	4/20	4/30	5/ 2	4/ 2	4/ 1	4/22	4/ 3	4/24	4/11	
Great Egret	4/14	4/ 1	0	0	0	0	0	4/ 4	0	0	4/30	3/29	4/ 1	5/ 2	0	3/27	5/ 2	4/12	3/27	3/28	3/29S	
Snowy Egret	4/17	4/ 4	0	0	0	0	0	0	0	0	0	0	3/29	0	4/20	4/11	4/19	--	4/ 4	3/28	3/29S	
Glossy Ibis	4/15	4/23	0	0	0	5/ 2	4/30	3/21	0	0	0	0	4/23	0	0	4/17	0	0	0	4/24	3/29S	
Whistling Swan	3/ 6	2/26	3/13	3/17	0	0	3/ 3	2/24	3/15	2/21	2/24	2/18	--	0	--	0	2/28	--	--	--	--	
Canada Goose	3/ 2	2/23	3/ 1	2/24	--	--	2/22	2/16	--	--	2/28	2/17	--	2/28	--	2/22	2/28	2/19	--	--	--	
Gadwall	3/ 9	3/16	3/15	0	0	0	0	--	0	0	2/28	3/23	--	0	3/16	0	0	0	0	3/28	--	
Common Pintail	3/ 3	2/27	0	0	3/ 1	0	2/22	3/21	3/23	2/20	2/26	0	2/28	0	0	0	--	0	2/16	3/28	--	
Green-winged Teal	3/20	3/22	3/15	3/15	3/29	3/29	0	--	0	3/26	3/22	3/ 1	--	0	0	0	3/17	0	--	3/28	--	
Blue-winged Teal	3/22	3/27	3/15	3/25	3/29	3/22	4/20	3/21	4/11	4/ 8	4/ 4	3/ 8	4/23	3/22	3/ 7	--	4/ 1	--	--	3/28	3/29S	
American Wigeon	3/ 5	3/16	3/31	3/17	3/29	3/15	2/22	--	0	--	2/28	3/22	3/25	0	3/ 7	0	3/13	0	--	--	--	
Wood Duck	3/ 9	2/28	3/ 6	2/21	3/ 1	2/27	--	2/21	--	3/29	2/21	2/28	3/15	--	--	--	3/15	2/24	--	3/28	--	
Redhead	3/ 7	3/ 1	3/15	3/ 3	0	0	2/22	--	0	3/ 4	2/24	3/ 5	2/28	0	3/ 1	2/ 8	0	0	--	0	0	
Ring-necked Duck	3/ 6	3/ 4	3/ 4	3/ 1	0	0	2/22	--	0	2/20	2/26	3/ 4	3/14	2/23	3/ 7	3/21	3/14	0	--	0	3/29S	
Canvasback	3/14	2/22	0	0	3/ 1	0	2/22	--	0	2/22	0	--	--	0	3/ 1	0	2/15	0	--	--	--	
Lesser Scaup	3/ 6	3/ 7	3/28	3/12	3/ 7	0	--	--	0	3/12	2/17	--	--	2/27	3/ 7	2/ 8	3/18	0	--	--	--	
Common Goldeneye	3/ 3	2/25	0	0	3/ 1	3/ 1	2/22	2/21	0	2/ 5	0	--	--	--	3/ 1	--	0	0	--	--	--	
Bufflehead	3/12	2/28	4/ 5	4/15	0	0	2/22	--	0	2/21	2/28	--	--	2/19	3/ 1	0	3/14	0	--	--	--	
Oldsquaw	3/22	4/ 4	4/ 4	0	4/ 5	0	0	--	0	4/ 4	0	0	0	0	3/ 1	--	0	0	--	--	3/29S	
Hooded Merganser	3/ 7	3/ 9	3/ 3	0	3/ 1	3/15	2/22	3/21	0	2/23	2/28	3/10	--	3/22	3/16	3/21	0	0	0	3/ 6	3/ 9	
Common Merganser	3/ 4	3/ 1	3/ 1	0	3/ 1	3/14	2/22	--	0	2/ 5	3/ 1	--	0	--	2/28	0	--	0	0	--	0	
Red-breast Merganser	3/15	3/ 6	3/15	3/ 7	0	0	3/ 3	2/ 5	0	3/17	4/16	--	3/ 4	--	3/ 1	2/ 8	3/31	0	3/ 6	0	--	
Turkey Vulture	--	3/ 1	2/26	2/21	--	3/ 7	--	2/28	--	--	--	3/ 1	3/ 1	--	--	--	--	--	3/20	--	--	
Sharp-shinned Hawk	3/11	3/29	--	4/ 3	4/ 1	3/29	--	--	--	3/29	--	3/ 1	3/ 2	--	3/14	--	--	--	--	--	--	
Red-tailed Hawk	2/28	3/ 3	3/15	--	--	3/ 7	3/ 3	2/28	--	--	--	--	2/25	--	--	--	--	--	--	--	--	
Red-shouldered Hawk	--	3/ 2	3/13	--	--	3/ 8	--	2/22	--	--	3/ 1	--	3/ 4	--	--	--	--	--	2/28	--	--	
Broad-winged Hawk	4/17	4/ 9	--	--	4/18	4/ 8	4/28	4/ 9	--	3/28	3/28	4/ 8	4/ 8	--	4/19	--	4/30	0	4/27	--	--	
Northern Harrier	--	3/14	--	4/ 2	0	4/18	0	3/28	--	2/28	3/ 1	2/18	3/13	0	3/14	--	4/ 1	0	--	--	--	
Osprey	3/26	3/21	4/13	--	3/28	3/29	4/15	3/21	--	4/11	3/29	3/21	3/17	3/21	--	3/20	3/ 9	3/22	3/ 7	3/ 9	3/29S	
Merlin	--	--	0	0	0	0	0	0	0	0	3/21	0	4/ 7	0	4/25	0	0	--	0	4/24	0	
American Kestrel	3/ 3	3/ 7	3/ 1	3/31	--	3/ 7	2/25	3/15	--	--	3/19	--	2/25	--	3/ 7	--	--	--	--	--	--	
Sora	4/27	5/ 2	0	0	0	5/30	0	5/ 2	0	0	0	0	5/ 2	0	0	0	5/ 2	0	5/12	5/ 2	0	
Common Gallinule	5/ 4	5/ 2	5/ 2	0	4/25	0	0	--	0	--	5/ 2	0	5/ 2	0	0	0	0	0	0	5/ 2	5/ 2S	
American Coot	4/16	3/31	4/ 1	3/15	--	0	0	--	0	4/ 1	0	3/23	--	0	0	0	3/31	0	0	4/ 9	3/29S	
Semipalmated Plover	5/ 5	5/ 2	5/16	5/ 4	0	5/16	0	5/ 1	0	0	5/11	0	4/29	0	0	0	4/28	5/ 3	5/ 2	4/24	5/ 1	
Killdeer	2/28	2/28	3/ 1	2/18	--	3/ 8	3/15	2/21	--	2/19	2/16	2/22	2/28	--	3/ 1	3/31	--	--	3/29	--	--	
Black-bellied Plover	5/ 2	5/ 2	--	0	0	0	0	5/ 2	0	0	5/ 2	0	3/17	0	3/16	5/ 9	5/ 2	0	5/ 4	4/24	--	
Greater Yellowlegs	3/24	3/30	4/27	0	4/ 5	3/15	4/27	4/ 6	--	3/31	4/19	3/ 8	3/27	4/12	4/20	--	4/ 1	3/29	3/15	3/28	3/29S	
Lesser Yellowlegs	4/16	4/ 1	4/27	--	0	3/29	--	4/10	--	4/ 1	--	4/23	3/31	4/ 8	3/14	--	4/ 1	--	3/15	4/24	--	
Solitary Sandpiper	4/30	4/20	4/27	4/19	4/24	4/10	4/18	4/18	4/20	4/22	4/19	4/21	4/18	--	--	--	4/28	0	--	--	5/ 1	
Spotted Sandpiper	4/27	4/19	4/ 5	--	4/24	4/ 4	--	4/12	--	4/12	4/18	4/21	4/23	4/26	4/20	--	4/16	--	4/25	--	--	
American Woodcock	2/28	2/25	4/ 5	2/25	4/ 4	--	--	2/21	--	3/12	2/21	2/27	--	2/18	3/14	2/15	--	2/18	--	3/28	2/ 6	
Common Snipe	3/13	3/14	3/19	--	3/ 5	3/ 8	--	3/15	0	0	2/28	3/29	3/14	--	2/28	--	3/22	3/28	3/11	3/ 6	3/29S	
Short-bill Dowitcher	5/ 4	5/ 2	--	0	0	--	0	5/ 2	0	0	0	0	0	0	4/26	5/ 2	0	0	5/ 4	5/ 2	5/ 1	
Semipalm Sandpiper	5/ 4	5/ 2	5/17	5/ 2	0	4/10	0	0	0	4/25	5/ 2	5/ 2	5/ 2	0	5/16	5/ 2	4/28	5/ 2	4/20	5/ 2	5/ 2	
Least Sandpiper	5/ 1	4/25	4/27	4/30	0	4/26	0	4/25	--	0	--	0	4/24	0	--	--	4/ 8	4/30	4/20	3/28	--	
White-rump Sandpiper	--	5/ 2	0	--	5/ 2	0	0	5/16	0	0	0	4/30	0	0	5/16	0	5/ 2	0	0	4/24	--	

Table 1 (cont.). Spring Arrival Dates, 1981

Table 1 (cont.). Spring Arrival Dates, 1981																					
Species	Median		Carr	Alle	Wash	Fred	Carr	Balt	Harf	Howa	Mont	Pr.G	AnAr	Char	Calv	St.M	Kent	Caro	Talb	Dorc	LES
	10-yr	1981																			
Pectoral Sandpiper	4/13	3/28	4/ 1	0	--	3/15	0	3/31	0	3/26	--	3/29	3/27	0	3/14	--	4/ 1	4/30	--	3/22	--
Dunlin	4/28	5/ 1	4/29	5/ 6	0	0	0	0	0	0	0	5/ 2	--	0	3/14	0	5/ 1	0	5/ 4	3/28	--
Laughing Gull	4/ 9	4/ 1	0	0	0	0	0	4/ 4	0	0	0	0	3/18	5/ 2	3/18	4/ 3	4/ 1	4/ 2	4/ 1	4/24	3/29S
Bonaparte's Gull	3/31	3/30	4/ 4	4/ 4	3/ 8	4/11	4/20	2/28	0	0	--	0	3/17	0	--	--	--	0	3/25	0	--
Forster's Tern	4/24	4/29	0	0	0	0	0	4/ 7	0	0	0	0	4/29	0	5/12	0	0	5/13	0	--	3/29S
Common Tern	5/ 1	5/ 2	0	0	0	0	0	4/27	0	0	5/ 2	0	5/16	0	5/10	5/ 2	5/ 2	0	5/ 1	5/ 2	4/ 9
Little Tern	5/ 4	5/ 2	0	0	0	0	0	--	0	0	0	0	5/11	0	5/16	5/ 2	0	0	5/ 2	5/ 2	5/ 9
Caspian Tern	4/28	4/24	4/27	0	0	0	0	4/ 7	0	0	0	--	4/ 1	0	5/12	0	0	0	0	4/24	--
Yellow-billed Cuckoo	5/ 6	5/ 2	--	--	5/ 1	--	--	5/ 2	--	5/ 2	5/ 2	5/ 2	5/ 2	5/ 2	5/ 2	5/31	--	5/ 1	5/ 2	4/21	5/ 2
Black-billed Cuckoo	5/ 6	5/ 7	5/20	--	5/ 2	--	--	5/16	--	5/ 7	5/ 2	5/ 2	0	0	0	0	0	0	5/ 7	0	0
Chuck-will's-widow	5/ 3	5/ 2	0	0	5/ 2	0	0	5/ 2	0	0	0	4/20	4/28	--	--	--	5/ 2	5/ 2	4/20	5/ 2	5/ 2
Whip-poor-will	4/24	4/16	--	--	--	--	--	4/19	--	4/16	--	4/20	--	4/10	--	4/11	--	4/11	--	--	4/19S
Common Nighthawk	5/ 6	5/ 7	--	5/ 4	--	--	--	5/10	5/14	5/ 4	--	--	5/ 2	5/12	5/22	--	5/ 2	5/ 2	5/ 2	5/ 2	--
Chimney Swift	4/18	4/14	--	4/27	4/25	4/ 3	--	4/ 4	--	4/19	4/16	4/11	3/27	4/21	--	--	4/14	4/19	4/12	--	4/14W
Ruby-thr Hummingbird	4/30	4/30	5/ 2	5/ 2	5/ 2	5/ 2	--	5/ 1	5/ 2	4/26	4/21	4/21	4/19	4/28	5/ 9	5/ 2	4/17	4/18	4/19	5/ 2	4/19
Belted Kingfisher	3/15	3/14	4/ 6	4/ 5	2/ 6	3/ 8	--	2/13	--	3/18	--	--	4/ 3	--	3/14	--	2/22	--	--	--	--
Common Flicker	3/18	3/28	4/ 8	3/29	3/28	3/ 8	--	3/27	3/29	4/ 4	3/15	3/29	3/27	3/29	3/ 7	--	3/ 1	--	--	3/ 2	--
Yellow-bel Sapsucker	--	4/ 2	3/30	4/ 3	4/ 2	3/14	0	3/31	0	4/12	3/28	4/ 2	4/ 5	4/11	0	0	--	0	--	0	--
Eastern Kingbird	4/28	4/24	4/30	--	--	4/18	--	4/25	--	4/26	4/24	4/23	4/23	4/23	--	4/23	4/ 5	4/30	4/12	4/24	4/25W
Gt Crest Flycatcher	5/ 1	4/29	5/ 2	5/ 2	5/ 2	5/ 2	4/29	5/ 1	5/ 2	4/21	4/23	5/ 2	4/29	4/27	--	5/ 2	4/28	4/ 9	4/24	4/24	4/18
Eastern Phoebe	3/18	3/20	3/16	3/19	3/28	3/14	--	2/16	3/29	3/21	2/24	2/27	3/27	--	4/20	--	3/28	2/26	3/29	3/28	3/29S
Acadian Flycatcher	5/ 5	5/ 1	--	--	5/ 2	5/ 2	--	5/ 1	5/ 2	5/ 1	4/26	4/29	--	4/27	--	5/ 2	5/ 1	4/28	--	--	5/ 2
Willow Flycatcher	5/20	5/18	--	--	--	5/20	5/14	5/18	--	--	5/ 2	--	5/24	0	0	0	0	0	0	0	0
Least Flycatcher	5/ 6	5/ 2	5/ 2	5/ 2	5/ 2	0	0	4/30	0	5/16	5/ 2	0	0	0	5/31	0	0	0	0	0	0
Eastern Pewee	5/ 5	5/ 2	5/ 2	5/ 2	5/ 2	--	--	5/ 2	--	5/11	5/ 2	4/30	--	5/12	5/ 9	--	5/ 2	4/29	5/ 4	4/24	5/ 2
Tree Swallow	3/29	3/28	4/ 4	3/31	4/ 1	3/28	--	4/ 5	--	3/28	3/ 1	2/26	3/13	3/ 1	4/18	--	3/ 1	3/26	3/18	3/28	3/29S
Bank Swallow	5/ 1	4/18	4/30	--	--	--	0	4/11	4/12	5/ 1	4/21	--	4/18	--	4/18	--	4/19	--	4/ 1	--	4/19S
Rough-winged Swallow	4/17	4/ 8	4/15	3/31	3/28	4/ 4	4/21	3/31	4/18	4/23	3/29	--	3/31	5/ 2	4/18	--	4/ 8	0	4/20	3/31	4/ 7
Barn Swallow	4/ 7	4/ 8	4/15	--	4/18	4/ 4	--	3/28	4/12	4/ 1	4/12	--	3/29	4/ 1	4/18	4/11	3/29	4/ 9	4/ 5	3/28	4/18
Cliff Swallow	5/ 3	4/26	4/27	5/ 2	4/25	4/26	--	4/26	5/ 2	4/26	4/26	5/ 2	4/ 9	0	4/18	5/ 2	0	0	4/19	0	0
Purple Martin	4/ 3	3/31	4/30	4/ 7	3/28	4/ 4	--	4/ 7	--	4/ 1	--	3/27	3/13	3/29	4/18	4/12	3/31	3/28	4/ 3	3/28	3/29S
Brown Creeper	--	3/18	3/ 1	--	3/18	3/ 8	3/15	3/29	0	3/11	3/ 1	4/ 7	--	0	0	0	4/16	--	--	--	--
House Wren	4/21	4/21	4/26	4/28	4/24	4/18	4/18	4/18	4/29	4/20	4/16	4/ 1	4/25	4/27	--	--	4/21	4/17	4/23	4/24	4/19S
Marsh Wren	5/ 2	4/30	0	0	0	0	0	--	--	0	5/ 2	5/ 2	4/20	0	--	5/ 2	4/30	4/29	--	3/28	4/19S
Gray Catbird	4/25	4/28	4/29	4/28	4/30	--	4/29	4/24	4/29	4/24	4/28	4/29	4/28	4/29	--	--	4/22	4/30	4/26	--	4/19
Brown Thrasher	4/ 8	4/ 5	4/ 1	--	4/ 7	4/ 7	--	4/ 1	--	4/ 4	4/ 5	3/29	4/ 9	3/22	4/18	--	4/ 1	3/16	4/ 9	4/24	4/ 8
American Robin	2/22	2/20	2/26	2/15	2/25	3/13	3/15	2/17	2/10	2/20	2/ 7	2/16	3/ 1	--	2/28	--	2/15	--	2/11	3/ 2	--
Wood Thrush	4/23	4/24	5/ 2	5/ 2	5/ 1	5/ 2	4/29	4/23	--	4/24	4/17	4/24	4/23	4/27	--	--	4/12	4/18	4/23	4/24	4/23W
Hermit Thrush	4/13	4/ 7	4/ 7	0	4/ 4	4/ 7	0	3/15	0	0	4/15	--	0	3/20	--	0	4/14	--	--	0	4/ 8
Swainson's Thrush	5/ 6	5/ 2	0	0	0	5/16	0	5/ 2	0	5/ 2	4/27	--	--	--	0	0	0	0	0	5/ 2	5/ 2W
Gray-cheeked Thrush	5/ 9	5/16	0	0	0	5/16	0	5/17	0	5/25	5/15	--	0	0	0	0	0	0	0	0	0
Veery	5/ 3	5/ 2	5/ 6	5/ 2	5/ 2	0	--	4/26	5/ 2	5/ 1	4/27	4/29	5/ 2	5/ 3	--	0	5/ 2	5/ 2	5/ 2	0	0
Eastern Bluebird	2/25	3/ 4	3/ 4	--	2/15	3/ 8	--	--	2/ 7	--	3/29	3/23	3/ 4	--	2/28	--	2/14	--	2/ 3	3/28	--
Blue-gray Gnatcatcher	4/12	4/ 8	4/12	--	4/11	4/10	4/12	4/ 5	4/19	4/ 8	4/ 5	4/ 8	4/ 5	4/ 5	4/20	4/ 4	4/ 7	4/ 7	4/12	4/24	4/ 7
Golden-cr Kinglet	3/25	3/21	3/30	--	3/29	3/14	3/15	3/29	2/16	2/15	3/ 1	--	4/ 5	--	3/27	--	--	3/16	--	3/28	--
Ruby-cr Kinglet	4/10	4/10	4/28	--	4/ 1	4/10	4/12	4/ 7	--	4/10	4/20	4/17	4/ 5	3/ 3	4/12	--	4/ 1	--	--	3/28	--
Water Pipit	3/23	3/11	0	3/15	4/ 4	3/ 8	0	2/24	0	0	2/28	0	3/17	0	0	0	0	0	--	0	0
Loggerhead Shrike	--	--	0	0	0	3/29	--	0	0	0	0	0	0	0	0	0	--	3/15	3/24	0	0
White-eyed Vireo	4/22	4/22	5/ 2	--	--	--	--	4/28	4/26	4/18	4/22	4/19	4/23	4/12	--	4/24	4/18	4/16	4/28	4/24	4/18
Yellow-thr Vireo	4/30	5/ 1	5/ 2	--	5/ 1	--	5/ 5	5/ 2	5/ 6	--	4/26	4/23	4/29	4/26	--	5/ 2	4/26	5/ 2	5/ 1	--	4/18
Solitary Vireo	4/26	4/12	4/ 9	--	4/ 4	--	0	4/24	0	4/17	4/11	4/16	4/12	0	0	0	4/12	0	--	0	4/ 5
Red-eyed Vireo	4/30	4/24	5/ 2	5/ 2	5/ 1	5/ 2	--	4/24	--	4/28	4/26	4/19	4/26	4/24	--	--	4/18	4/17	4/19	4/24	4/18
Warbling Vireo	5/ 1	4/29	--	5/ 2	4/22	4/18	--	5/ 2	5/ 2	5/ 2	4/25	4/29	5/ 2	--	--	0	4/25	4/26	0	0	0
Black-&-white Warb	4/22	4/16	4/11	--	5/ 1	--	--	4/19	--	4/18	4/14	4/ 7	4/11	4/12	4/20	--	4/ 8	4/26	4/19	4/24	4/ 7

Table 1 (cont.). Spring Arrival Dates, 1981

Species	Median		Garr	Alle	Wash	Fred	Carr	Balt	Harf	Howa	Mont	Pr.G	AnAr	Char	Calv	St.M	Kent	Caro	Talb	Dorc	LES
	10-yr	1981																			
Prothonotary Warbler	4/24	4/22	0	0	4/22	--	0	--	0	0	4/18	4/24	4/24	4/28	--	--	4/22	4/20	4/22	4/24	4/18
Worm-eating Warbler	5/2	4/26	--	5/2	5/1	5/2	5/4	4/25	--	4/26	4/26	4/24	5/2	5/3	--	--	4/12	5/2	4/19	4/24	4/18
Golden-wing Warbler	5/3	5/2	4/29	5/2	5/2	0	0	4/30	0	0	5/2	5/2	0	5/2	5/16	0	5/2	0	0	0	0
Blue-winged Warbler	5/3	4/30	0	5/2	5/1	5/2	5/2	4/30	5/2	4/27	4/23	4/24	4/25	5/3	--	5/2	4/23	5/2	4/22	4/24	4/19
Tennessee Warbler	5/5	5/2	0	5/2	5/2	0	0	5/2	0	5/2	4/30	5/2	5/14	0	5/17	0	5/2	0	5/4	0	0
Nashville Warbler	5/2	5/2	4/27	5/2	5/2	0	0	5/2	0	5/2	4/30	4/24	0	0	--	0	5/12	0	5/7	0	0
N. Parula Warbler	4/25	4/19	4/27	--	--	--	4/30	--	--	4/18	4/12	4/16	4/26	4/11	--	--	4/28	4/27	4/19	--	4/ 85
Yellow Warbler	4/26	4/26	4/30	4/28	4/25	5/2	4/29	4/27	4/26	4/24	4/24	4/24	4/23	4/26	--	4/17	4/28	4/20	4/21	4/24	--
Magnolia Warbler	5/5	5/2	5/2	5/2	5/2	5/2	5/2	5/2	5/2	4/30	4/29	5/3	4/30	0	--	0	5/2	0	5/10	0	--
Cape May Warbler	5/4	5/2	5/2	5/2	5/2	5/2	0	--	0	5/2	5/1	4/30	5/2	0	5/9	0	5/13	0	0	0	0
Black-thr Blue Warb	5/4	5/1	5/2	5/2	5/1	--	0	4/27	4/29	5/1	5/2	4/29	4/28	4/26	0	5/2	5/2	0	4/22	--	5/ 2W
Yellow-rumped Warb	4/15	4/12	4/27	4/13	4/25	3/28	--	4/7	--	4/4	4/12	4/11	--	4/12	--	--	4/1	--	4/12	--	--
Black-thr Green Warb	5/4	4/30	4/27	5/2	4/25	0	--	4/30	5/2	4/30	4/30	4/26	4/29	5/2	0	0	5/2	--	4/30	0	5/ 2W
Cerulean Warbler	5/3	4/30	5/2	--	4/25	--	--	4/30	5/2	5/2	4/25	4/30	4/30	0	0	5/9	5/2	0	5/1	0	0
Blackburnian Warbler	5/5	5/2	5/2	5/2	5/2	5/2	0	--	0	5/2	4/29	4/30	5/2	0	0	0	5/13	--	5/2	0	0
Yellow-thrtd Warbler	4/17	4/19	--	0	4/11	4/10	--	4/8	0	5/1	4/21	--	4/29	--	4/19	--	4/19	5/2	4/12	4/19	4/7
Chestnut-sided Warb	5/5	5/2	4/29	5/2	5/2	0	0	4/30	5/2	--	5/2	5/1	5/2	5/3	--	5/2	5/1	0	5/8	5/2	0
Bay-breasted Warbler	5/7	5/2	5/2	0	5/2	0	0	0	--	0	--	--	--	0	--	0	5/12	--	5/24	0	0
Blackpoll Warbler	5/5	5/2	0	0	5/2	--	0	4/29	0	5/16	5/2	4/28	5/1	5/2	5/17	0	5/8	5/7	5/2	0	5/2
Pine Warbler	3/17	4/1	0	4/4	4/4	--	--	4/4	4/17C	3/27	--	3/28	2/27	3/14	--	--	3/31	4/1	3/22	3/23	4/7
Prairie Warbler	4/25	4/24	4/12	--	4/18	4/18	4/29	4/27	4/26	4/27	4/24	4/19	4/24	4/12	--	--	4/27	5/2	4/21	5/2	4/19
Palm Warbler	4/15	4/12	0	0	--	0	4/18	4/6	4/15	4/14	4/11	--	4/10	0	4/12	0	4/8	0	--	0	--
Ovenbird	4/24	4/24	4/28	5/2	5/1	5/2	--	4/26	5/2	4/22	4/24	4/18	4/26	5/2	5/2	5/2	4/16	4/18	4/19	4/24	4/18
Northern Waterthrush	5/1	5/2	--	5/2	4/24	0	0	4/26	4/29	5/2	4/20	5/2	4/27	0	0	5/2	--	5/2	--	5/2	5/ 2W
Louisiana Waterthr	4/7	4/10	4/12	4/9	4/4	4/18	--	4/11	4/19	4/2	4/4	4/2	4/11	4/5	--	--	4/8	4/16	4/19	--	4/5
Kentucky Warbler	5/3	5/1	5/4	--	5/2	--	--	5/2	5/2	4/26	4/30	4/28	4/29	5/2	--	5/2	5/1	4/28	5/1	4/27	4/18
Common Yellowthroat	4/21	4/20	5/2	4/28	--	--	4/23	4/9	4/25	4/24	4/19	4/21	4/18	4/26	--	--	4/16	4/20	3/29	4/19	4/18
Yellow-breasted Chat	5/4	5/2	5/14	5/2	5/2	--	4/27	4/28	5/2	5/2	5/2	4/29	5/2	5/2	--	5/2	4/28	5/2	4/30	5/2	--
Hooded Warbler	5/1	4/29	4/28	5/2	5/2	--	--	4/27	5/2	4/24	4/29	4/29	4/26	5/2	5/2	5/2	--	5/1	4/24	4/24	4/18
Wilson's Warbler	5/6	5/2	0	0	5/2	--	0	--	0	5/2	5/2	5/2	--	0	0	0	5/12	--	0	0	5/ 2W
Canada Warbler	5/7	5/2	5/10	0	5/2	0	0	4/30	5/8	5/2	5/2	5/2	5/2	0	5/16	0	5/16	--	5/18	0	0
American Redstart	5/1	4/29	5/2	5/2	5/2	--	5/2	5/2	5/2	4/24	4/25	4/29	5/2	5/2	--	--	4/29	--	--	0	4/18
Bobolink	5/5	5/2	4/30	5/2	5/2	--	0	4/30	5/5	5/2	5/2	5/2	5/2	0	0	5/2	5/2	5/3	5/1	5/2	5/ 2S
Red-winged Blackbird	2/22	2/20	--	2/18	3/1	2/15	2/22	2/4	2/25	2/10	2/16	--	--	3/3	3/1	--	--	--	--	3/2	--
Orchard Oriole	5/2	4/29	0	5/2	5/1	5/2	--	4/29	5/2	4/27	5/2	4/24	4/23	4/23	5/2	5/2	4/22	4/26	4/20	4/24	5/1
Northern Oriole	4/30	4/28	5/2	5/2	4/26	4/28	4/28	4/29	5/2	4/30	4/25	5/2	4/29	4/26	5/12	--	4/25	4/28	5/1	4/24	--
Rusty Blackbird	3/8	3/22	--	0	--	3/15	0	--	3/31	3/1	2/24	--	3/24	3/20	0	0	--	3/26	3/28	0	--
Common Grackle	2/24	2/17	--	2/16	2/14	2/15	--	2/17	2/25	--	2/10	2/19	--	3/4	3/1	--	--	--	--	--	--
Brown-headed Cowbird	3/4	3/1	2/4	--	--	3/14	--	--	--	--	2/20	--	--	--	3/1	--	--	--	--	3/2	--
Scarlet Tanager	5/1	4/29	5/2	4/27	5/2	5/2	4/29	5/1	5/2	4/30	4/24	4/19	4/29	4/28	5/2	5/2	4/28	4/24	4/25	4/24	4/18W
Summer Tanager	5/5	5/2	5/2	0	0	0	0	0	0	0	5/2	--	5/9	--	--	5/2	0	4/29	5/2	4/24	4/18
Rose-br Grosbeak	5/4	5/2	4/24	5/2	5/2	4/28	0	5/2	0	5/2	5/2	--	5/2	5/2	--	5/2	5/13	0	4/25	5/2	5/2
Blue Grosbeak	5/5	5/1	0	0	5/2	5/14	--	4/29	--	--	5/2	4/30	4/27	5/2	5/21	5/2	4/28	4/30	5/1	4/30	5/2
Indigo Bunting	5/1	5/1	4/29	5/2	5/1	5/2	4/29	4/18	5/2	5/1	5/2	5/2	5/2	4/30	5/10	5/2	4/28	5/1	4/30	4/24	--
Purple Finch	2/23	4/14	--	--	4/18	4/21	0	4/11	0	--	--	--	--	3/29	--	--	4/7	--	4/23	--	--
Rufous-sided Towhee	3/24	4/2	3/19	4/2	4/2	4/11	--	4/1	--	--	4/5	--	4/3	3/18	3/16	--	3/19	--	4/12	--	4/7
Savannah Sparrow	3/22	3/28	4/30	3/31	--	3/29	--	3/21	0	3/26	3/8	--	4/16	0	3/8	--	3/2	--	3/29	3/28	3/29S
Grasshopper Sparrow	5/2	5/2	--	--	5/2	3/29	--	5/2	--	5/2	5/2	--	5/2	5/2	5/12	5/2	4/16	5/2	4/25	4/24	--
Vesper Sparrow	4/5	4/8	4/8	4/8	4/1	4/18	--	4/4	--	4/28	--	--	4/12	0	3/14	0	4/1	--	0	0	--
Chipping Sparrow	4/4	4/1	3/30	3/23	3/30	4/18	--	4/3	--	4/1	4/5	--	--	3/21	4/18	--	4/3	3/16	4/3	4/19	--
White-crown Sparrow	5/3	4/11	4/30	0	--	4/26	--	--	0	4/22	--	--	--	0	0	--	4/1	3/15	3/29	--	--
Fox Sparrow	3/4	2/24	0	0	2/19	3/7	0	2/16	0	2/18	2/19	2/26	2/24	--	3/1	--	0	2/28	0	0	0
Lincoln's Sparrow	--	5/3	5/1	5/4	5/2	0	0	5/14	0	0	4/22	0	0	0	5/11	0	0	0	0	0	0
Swamp Sparrow	4/15	4/9	4/30	4/28	--	3/15	--	4/9	--	3/29	4/15	--	--	--	3/7	--	4/1	--	4/12	4/9	--

American Wigeon on the Potomac River near Hughes Hollow on Mar. 29. A drake Northern Shoveler was on the lake at Herrington Manor on Apr. 5 (Pope). A female Wood Duck with 5 downy young was at Lake Roland on the early date of Apr. 25 (Ringler) and a total of 43 Wood Ducks was counted at Lilypons, May 22 (D. Wallace).

Diving Ducks. Concentrations of Redheads have been scarce in recent years, so 50 at Piney Run on Mar. 7 (Blom) and 34 at Mountain Lake Park on Mar. 15 (Pope) were notable. Pope also counted 64 Ring-necked Ducks at Turkey Neck on Deep Creek Lake, Mar. 31. Armistead and Perry estimated 720 Canvasbacks at West Ocean City on Mar. 9. Unusually late among the divers were two Canvasbacks at Eastern Neck, May 18 (Parks), a flightless Lesser Scaup at Carroll Island, May 16 (Ringler, Blom), and single Buffleheads at Deal Island WMA, May 6 (Reese, Meritt) and in Howard County, May 25 (Leifer). Out of place in the mountains were 11 Oldsquaws on Broadford Reservoir, Apr. 4, 5 there the next day (Pope), and on the latter date another on the pond at Blairs Valley, Washington Co. (Boone). A Harlequin Duck and a King Eider were at Ocean City during the period Mar. 9-22 (many observers). Another Harlequin Duck, an immature male, was at Ocean City, May 1-3 (Ringler, et al.). Thirteen White-winged Scoters at Piney Run on Apr. 12 and 3 at Greenbrier State Park the same day (Keedy) were exceptional at those locations. Single Ruddy Ducks remained at Lake Elkhorn in Columbia, May 15 (Ludwig), and at Masonville, May 16 (Ringler). On May 14 Wierenga counted 32 Red-breasted Mergansers passing Ft. Smallwood. Another lingered at Piscataway, May 16 (Nistico). The hybrid duck previously reported remained at Annapolis through Mar. 19.

Vultures and Hawks. Hal Wierenga, ably assisted by Rick Blom and occasionally other observers, conducted an unprecedented spring hawk watch at Ft. Smallwood Park in northeastern Anne Arundel County at the mouth of the Patapsco River. The group amassed an amazing total of 9,828 raptors migrating along the bay despite missing several weeks during the early part of the season. Particularly impressive were the totals of vultures, accipiters, Ospreys, and Merlins as noted in Table 3-A. Also surprising was the relatively unknown late migration of most species which has gone unrecorded in the past because observers tend to drift off to other birding pursuits. Anyone interested seriously in hawkwatching should contact Hal about this unique site.

In Allegany County 2 Black Vultures were at Rocky Gap, Mar. 8 (Wilkinson), and 7 were flying over Oldtown on Mar. 15 (Paulus). Ethel Engle counted 16 Black Vultures at Tanyard, Caroline Co., Mar. 14-16. A Swallow-tailed Kite was reported from Sugarloaf Mountain, May 25, by Steve Steimel. Paul O'Brien reported a very late Northern Goshawk at Rockville, Apr. 22. The Hayes's observed a Cooper's Hawk in Prince George's County on May 20, which would be rather late for a migrant. Haven Kolb found a Red-shouldered Hawk nest with 2 young near Prettyboy on May 15. Woody Martin found that the Red-shouldered Hawks nesting along the Patuxent River produced 1.9 young per pair this year, the third best year in his 11 years of checking the nests. A kettle of 35 Broad-winged Hawks was floating over Seneca on Apr. 12 (Ringler, Blom,

Table 2. Spring Departure Dates, 1981

Species	Median			Garr	Alle	Wash	Fred	Carr	Balt	Harf	Howa	Mont	Pr.G	AnAr	Char	Calv	St.M	Kent	Caro	Talb	Dorc	LES
	10-yr	1981																				
Common Loon	5/ 9	5/10	--	--	5/ 2	0	--	5/14	6/ 7C	5/26	5/21	--	5/27	--	4/20	5/ 2	4/22	0	5/ 2	5/ 9	5/10	
Horned Grebe	5/ 2	4/21	0	0	5/ 2	0	0	4/21	0	3/27	--	0	--	--	4/20	5/ 2	0	0	4/18	--	5/ 2	
Pied-billed Grebe	--	5/ 2	5/ 6	5/ 2	--	0	4/12	5/ 2	0	4/15	5/ 2	0	5/ 2	--	3/21	0	4/16	--	5/2	0	5/ 6S	
Dbl-cr. Cormorant	5/17	5/14	5/ 2	0	5/ 2	0	0	5/29	0	5/ 4	5/ 2	0	6/ 5	5/24	0	5/ 2	5/ 2	--	5/24	6/ 6	--	
Whistling Swan	5/ 2	4/19	3/15	--	0	0	--	4/19	3/15	4/19	--	--	5/ 2	0	3/21	0	5/ 2	4/18	3/20	5/ 9	--	
Canada Goose	5/ 5	5/ 2	--	6/ 4	--	5/ 2	--	--	--	3/25	5/10	5/25	5/ 2	4/10	4/26	--	5/ 2	5/25	5/ 3	--	--	
Snow Goose	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5/ 2	4/15	0	3/28	5/ 2	
Gadwall	4/26	5/ 2	3/15	0	0	0	0	5/ 2	0	0	5/ 2	5/ 2	5/ 2	0	3/21	0	0	0	0	5/ 2	5/ 2	
Common Pintail	5/ 3	3/25	0	0	--	0	3/22	3/21	3/23	3/12	5/ 2	0	--	0	0	0	5/17	0	--	3/28	--	
Green-winged Teal	4/29	3/31	3/31	3/15	--	3/29	0	--	0	3/26	5/16	5/ 2	--	0	0	0	5/ 2	0	3/29	5/ 9	--	
Blue-winged Teal	--	5/ 2	5/ 2	6/ 2	5/ 2	5/ 2	--	5/22	5/ 2	4/ 8	5/ 3	5/ 2	5/ 2	5/ 3	3/21	5/ 2	5/ 3Q	5/ 2	5/ 2	--	--	
American Wigeon	4/19	3/31	4/ 4	--	--	3/15	3/22	3/21	0	5/12	3/29	5/ 2	--	0	3/ 7	0	4/ 1	0	3/29	5/ 2	4/ 7	
Northern Shoveler	4/15	4/15	4/ 5	0	0	0	0	4/11	0	5/ 2	0	0	0	0	0	0	4/19	0	3/29	4/24	0	
Redhead	4/ 6	3/27	3/31	--	0	0	3/22	3/21	0	3/24	3/ 7	--	5/ 2	0	4/18	--	0	0	3/29	0	0	
Ring-necked Duck	4/15	4/ 5	4/ 4	5/ 2	0	0	3/22	4/ 2	0	5/14	3/29	5/ 2	--	5/ 2	3/21	--	--	0	5/ 2	0	4/ 5	
Canvasback	4/15	5/ 2	0	0	--	0	--	5/ 2	0	5/ 2	0	5/ 2	5/ 9	0	4/18	0	5/18	0	4/ 4	3/28	5/ 2	
Greater Scaup	--	4/20	0	0	0	0	3/22	4/20	0	0	0	0	5/ 9	0	4/20	5/ 2	5/ 2	0	0	0	--	
Lesser Scaup	5/ 1	4/21	5/ 2	5/ 2	4/22	0	3/22	5/16	0	3/12	5/ 2	5/ 2	5/ 2	--	4/20	--	3/18	0	4/17	3/28	4/ 5	
Common Goldeneye	4/27	4/21	0	0	--	--	--	4/21	0	2/ 7	0	--	--	5/ 3	4/20	--	0	0	5/ 2	3/28	--	
Bufflehead	5/ 2	5/ 2	5/ 2	5/ 2	0	0	--	4/27	0	5/25	5/ 2	4/16	5/ 2	--	4/20	0	5/ 2	0	5/ 2	5/ 2	5/ 2	
Oldsquaw	4/12	4/ 4	4/ 5	0	4/ 5	0	0	4/11	0	4/ 4	0	0	0	0	3/16	5/ 2	0	0	4/ 4	3/28	3/29S	
Ruddy Duck	5/ 5	5/ 2	5/ 2	--	5/ 2	0	0	5/16	0	5/24	5/ 2	0	5/ 2	4/26	0	0	5/18	0	3/29	5/ 3	--	
Hooded Merganser	4/20	3/27	4/ 5	0	--	4/15	3/22	5/ 2	0	3/25	3/29	--	4/27	3/22	3/16	3/21	0	0	0	--	--	
Common Merganser	4/ 9	3/22	3/ 1	0	--	3/14	3/22	4/ 9	0	4/ 4	5/ 2	3/ 8	0	5/ 3	3/21	0	3/21	0	0	3/28	0	
Red-br Merganser	5/ 5	5/ 3	4/ 5	--	0	0	--	5/ 2	0	5/ 4	5/ 2	5/16	5/16	5/ 3	3/21	--	5/ 2	0	5/ 5	0	--	
Rough-legged Hawk	3/30	4/24	0	0	4/23	4/15	0	--	0	0	5/ 2	0	3/13	0	4/25	--	3/15	0	0	5/ 2	5/ 2W	
Northern Harrier	--	5/ 2	5/ 2	5/ 2	5/ 2	5/ 2	0	--	5/ 2	5/ 2	5/ 2	--	5/26	0	3/21	--	5/17	0	4/26	--	--	
Merlin	--	5/ 2	0	0	5/ 2	0	0	0	0	0	5/ 2	0	5/14	0	4/25	0	0	5/ 2	0	4/24	5/ 2	
American Coot	5/ 4	5/ 2	4/20	5/ 2	5/ 2	0	0	5/ 2	0	6/ 5	0	3/23	5/ 2	0	0	0	4/22	0	0	4/ 9	5/ 2	
Semipalmated Plover	5/26	5/20	5/17	6/ 2	0	5/30	0	5/23	0	0	0	0	5/11	0	0	0	6/ 4Q	--	5/ 4	5/ 9	--	
Black-belly Plover	5/23	5/19	5/16	0	0	0	0	5/31	0	0	5/18	0	5/19	0	4/20	5/15	5/21	0	5/ 4	6/ 6	6/14	
Greater Yellowlegs	5/ 8	5/13	5/18	0	5/ 2	5/27	0	5/23	5/ 2	5/17	5/ 9	5/ 2	5/16	5/17	--	5/ 9	5/17	5/ 2	5/25	5/ 9	5/ 2W	
Lesser Yellowlegs	5/ 8	5/ 9	5/18	6/ 4	0	5/22	5/ 2	5/23	5/ 2	5/14	5/ 9	5/ 2	5/ 9	5/11	--	5/ 2	5/ 5	5/ 3	5/ 7	5/ 9	--	
Solitary Sandpiper	5/12	5/16	5/17	5/31	5/ 2	5/22	0	5/29	5/ 2	5/17	5/16	5/ 2	5/16	5/ 3	5/24	5/ 2	5/14	0	5/17	5/ 2	5/10	
Spotted Sandpiper	5/22	5/30	--	--	--	5/30	--	5/31	--	5/31	--	5/25	6/ 5	5/17	5/31	--	5/24	--	5/24	--	--	
Ruddy Turnstone	5/29	--	0	0	0	0	0	0	0	0	0	0	0	0	0	6/ 3	--	0	5/25	6/ 6	--	
Common Snipe	5/ 5	5/ 2	5/ 2	4/28	5/ 2	5/ 2	--	5/ 2	0	5/ 2	5/ 2	5/ 2	5/ 2	--	--	--	4/19	5/ 3	5/ 2	5/ 9	5/ 2W	
Short-bill Dowitcher	5/27	5/ 7	5/18	0	0	5/20	0	5/ 3	0	0	0	0	0	0	4/26	5/ 2	0	0	5/ 4	5/ 9	6/14	
Sanderling	--	--	0	0	0	0	0	0	0	0	0	0	0	0	5/10	6/ 3	5/ 2	0	0	0	--	
Semipalm Sandpiper	5/26	5/28	5/18	6/14	0	5/30	0	6/ 7	0	5/25	--	5/25	5/30	0	5/16	--	5/21	5/ 3	--	6/ 6	6/14	
Least Sandpiper	5/18	5/17	5/17	5/31	0	5/27	0	5/31	5/ 2	5/16	5/ 5	--	5/19	0	5/10	5/ 2	5/18	5/ 3	5/17	5/ 9	--	
Pectoral Sandpiper	5/ 8	5/ 2	5/ 7	0	5/ 2	5/22	0	5/ 2	0	0	5/ 2	5/ 2	--	0	5/24	5/ 2	5/ 8	5/ 3	5/ 6	5/ 9	--	
Dunlin	5/22	5/21	5/17	5/ 7	0	5/22	0	5/31	--	0	0	0	5/19	0	--	0	5/17	0	5/24	6/ 6	--	
Ring-billed Gull	--	5/23	--	--	--	5/13	0	5/23	--	6/ 2	--	--	--	5/31	--	--	5/18	--	--	--	--	
Bonaparte's Gull	5/ 3	5/ 2	5/16	0	--	4/11	--	5/ 2	5/ 2	0	5/ 2	5/ 2	6/ 4	0	--	5/ 2	5/ 2	0	4/23	0	5/ 2	
Caspian Tern	--	--	--	0	0	0	0	6/ 7	0	0	0	0	6/ 9	0	5/12	0	0	0	0	6/ 6	--	

Table 2 (cont.). Spring Departure Dates, 1981

	Median		Garr	Alle	Wash	Fred	Carr	Balt	Harf	Hova	Mont	Pr.G	AnAr	Char	Calv	St.M	Kent	Caro	Talb	Dorc	LES
	10-yr	1981																			
Black Tern	--	--	0	0	0	5/20	0	0	0	5/12	0	0	5/11	0	0	0	0	0	0	0	--
Yel-bell Sapsucker	5/ 2	4/30	5/ 2	--	5/ 3	5/ 2	0	4/27	0	4/18	5/ 2	5/ 2	--	4/11	0	0	4/15	0	4/22	0	--
Red-breast Nuthatch	5/ 5	5/ 2	5/ 2	5/ 2	5/ 2	5/ 2	3/22	4/29	5/ 2	5/ 2	5/ 8	5/ 4	5/ 2	--	--	5/ 2	5/ 2	5/ 2	5/ 3	5/ 2	--
Brown Creeper	4/24	4/25	--	--	5/ 2	3/25	3/22	4/ 7	--	4/18	5/ 2	--	--	0	0	0	5/ 2	5/ 3	--	--	--
Winter Wren	4/26	--	5/ 2	--	4/ 4	--	--	4/28	--	--	--	--	--	3/15	0	--	--	--	--	--	--
Hermit Thrush	5/ 4	5/ 2	--	--	--	4/ 8	0	5/13	5/ 2	5/ 2	5/10	--	0	--	4/25	0	5/ 2	5/ 2	4/26	0	5/ 20
Swainson's Thrush	5/24	5/25	0	0	0	5/16	0	6/ 4	0	5/25	5/30	5/24	6/ 2	5/24	0	0	0	0	0	5/25	--
Gray-check Thrush	5/22	5/24	0	0	0	5/16	0	5/31	0	5/25	5/23	5/24	0	0	0	0	0	0	0	0	0
Veery	5/19	5/24	--	--	--	5/24	--	--	0	5/18	5/23	5/26	6/ 2	5/14	5/31	0	5/17	--	5/25	0	0
Golden-cr Kinglet	4/16	4/11	3/31	4/ 4	5/ 2	5/ 2	--	4/11	4/ 2	5/ 2	--	4/11	--	--	3/27	--	4/12	--	--	3/28	--
Ruby-crown Kinglet	5/ 6	5/ 2	5/ 2	5/ 2	5/ 2	4/26	5/ 8	5/20	5/ 2	5/ 2	5/23	5/ 2	5/ 2	4/26	4/12	5/ 2	5/ 2	4/22	4/26	4/24	--
Water Pipit	5/ 4	5/ 2	0	0	5/ 2	5/20	0	5/ 6	0	0	0	0	5/ 2	0	0	0	0	0	5/ 2	0	4/18
Cedar Waxwing	5/21	5/28	--	--	--	--	--	6/ 4	6/ 8	--	--	5/25	5/30	5/24	--	--	--	5/11	--	--	--
Solitary Vireo	5/ 6	5/ 2	--	5/ 2	5/ 2	--	0	5/ 2	0	5/ 2	5/ 2	--	5/ 6	0	0	0	5/ 2	0	5/ 3	0	0
Blue-winged Warbler	5/ 9	5/11	0	--	--	5/14	--	--	--	5/11	5/25	--	5/ 2	5/ 3	5/17	--	5/13	5/ 9	--	5/ 9	--
Tennessee Warbler	5/18	5/23	0	--	5/17	0	0	5/24	5/16	5/23	5/23	5/27	5/14	0	5/17	0	5/24	0	5/ 4	0	0
Nashville Warbler	5/10	5/15	--	--	5/16	0	0	--	0	--	5/ 9	5/13	0	0	5/23	0	5/18	0	5/ 7	0	0
Magnolia Warbler	5/22	5/23	--	--	5/17	5/ 9	0	5/24	0	5/21	5/25	--	5/19	0	5/31	0	5/24	0	5/10	0	5/24
Cape May Warbler	5/13	5/21	5/ 7	--	--	--	0	5/24	0	--	5/24	--	5/24	0	5/ 9	0	5/18	0	0	0	0
Black-thr Blue Warb	5/16	5/15	--	--	--	5/16	0	5/24	--	--	5/24	5/14	5/ 9	--	0	--	5/13	0	5/12	5/20	5/24
Yellow-rump Warbler	5/14	5/15	6/ 3	5/ 5	5/17	5/ 3	5/ 2	5/17	5/ 3	5/17	5/13	5/21	5/17	5/10	--	5/ 2	5/21	5/ 2	5/ 3	5/ 9	5/ 6S
Blk-thr Green Warb	5/14	5/17	--	--	5/17	0	5/17	5/17	--	5/24	--	--	5/ 9	5/ 3	0	0	5/13	5/28	5/25	0	0
Blackburnian Warbler	5/16	5/24	--	--	--	--	0	5/24	0	--	5/24	--	--	0	0	0	5/27	5/24	5/ 4	0	0
Chestnut-sided Warb	5/17	5/18	--	--	5/17	0	0	5/14	--	5/23	5/24	--	--	--	5/31	--	5/18	0	5/ 8	--	0
Bay-breasted Warbler	5/20	5/23	5/ 2	0	5/16	0	0	5/23	0	5/17	5/24	5/24	5/19	0	5/23	0	5/12	5/23	5/26	0	0
Blackpoll Warbler	5/31	5/25	0	0	5/19	5/16	5/24	6/ 2	0	5/29	5/25	5/29	5/28	5/18	5/24	0	5/30	--	5/24	0	5/25
Palm Warbler	5/ 4	5/ 2	0	5/ 5	5/16	0	0	4/23	0	4/14	5/ 2	--	4/28	0	4/12	0	5/ 2	0	5/ 2	0	0
Northern Waterthrush	5/19	5/24	--	--	5/17	0	0	5/24	5/29	5/17	5/25	5/24	5/24	0	0	--	5/17	5/21	5/25	5/ 9	5/25
Mourning Warbler	5/26	--	0	0	0	0	0	5/30	0	0	5/31	0	5/24	0	0	0	0	0	0	0	0
Wilson's Warbler	5/24	5/20	0	0	5/16	5/31	0	5/23	0	0	5/24	5/20	5/20	0	0	0	5/12	5/23	0	0	0
Canada Warbler	5/26	5/24	--	0	5/17	0	0	6/ 4	5/13	6/ 6	5/31	5/24	5/24	0	5/23	0	5/30	5/23	5/30	0	5/24
American Redstart	5/29	5/28	--	--	5/25	5/31	--	5/31	5/29	5/25	5/26	5/25	5/24	--	5/31	--	5/30	5/23	5/30	0	5/24
Bobolink	5/16	5/20	--	--	5/17	5/20	0	6/ 7	0	5/17	5/23	5/20	6/ 9	0	0	--	5/20	--	5/ 6	5/ 9	5/22
Rusty Blackbird	5/ 6	5/ 2	5/ 6	5/ 2	4/25	4/10	0	--	0	5/ 2	5/ 2	5/ 2	--	3/22	0	0	5/ 2	--	3/28	0	0
Rose-breast Grosbeak	5/19	5/24	--	--	5/17	5/ 9	0	5/24	5/17	5/24	5/25	5/25	5/24	--	5/22	--	5/26	0	5/25	--	--
Evening Grosbeak	5/ 5	5/ 6	5/ 6	5/ 2	5/ 3	3/14	0	5/12	0	4/30	5/14	5/ 5	5/13	5/ 6	4/26	5/15	5/14	--	5/ 7	4/24	5/ 6S
Purple Finch	5/ 5	5/ 2	--	5/ 4	5/ 6	5/ 2	0	5/ 8	5/ 2	5/ 6	5/ 6	5/20	5/ 2	5/ 2	4/20	5/ 2	4/26	4/27	5/ 4	--	5/ 2
Pine Siskin	5/ 5	5/ 9	6/ 1	5/ 2	5/17	5/ 9	0	5/14	0	5/ 2	5/ 9	5/20	5/30	5/ 4	3/29	5/ 9	2/26	5/ 2	5/16	--	5/24
Savannah Sparrow	5/ 8	5/ 9	--	5/ 2	--	4/18	--	5/16	0	5/ 2	5/23	5/13	5/ 9	0	--	5/ 2	5/20	5/ 2	4/19	5/ 9	5/ 9S
Northern Junco	5/ 3	5/ 2	5/ 2	5/ 2	5/ 2	4/26	5/ 2	5/ 2	--	5/ 2	5/ 2	5/ 2	5/ 2	4/23	3/29	--	5/ 7	5/ 4	5/15	3/28	4/19
Am Tree Sparrow	3/24	3/28	4/ 2	--	--	3/28	2/22	3/21	--	4/ 4	--	--	0	0	0	0	--	0	--	--	--
White-crown Sparrow	5/ 9	5/ 8	5/17	5/ 2	5/19	5/ 2	5/ 2	5/22	5/ 2	5/ 9	5/ 2	5/ 2	5/ 7	0	0	5/ 2	5/ 5	5/ 5	5/ 2	5/ 9	5/10
White-throat Sparrow	5/12	5/17	5/21	5/ 5	5/12	5/17	5/ 8	5/24	5/14	5/17	5/23	6/ 5	5/24	5/23	5/12	--	5/ 8	5/ 5	5/19	5/25	5/ 6S
Fox Sparrow	4/ 8	3/25	0	5/ 2	4/12	3/15	0	3/24	0	4/ 8	4/15	3/18	3/29	3/22	3/21	3/20	0	3/26	0	0	0
Lincoln's Sparrow	--	5/23	5/22	0	0	0	0	5/24	0	0	5/25	0	0	0	5/14	0	0	0	0	0	0
Swamp Sparrow	5/ 9	5/ 4	--	0	5/17	--	--	5/18	5/ 9	5/ 2	5/17	5/ 5	5/ 9	--	--	5/ 2	5/ 2	5/ 2	5/ 3	5/ 2	--

September 1981

MARYLAND BIRDLIFE

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TABLE 3. Migrant Raptors, Spring 1981

3-A Fort Smallwood Park

<u>Species</u>	<u>Total</u>	<u>First</u>	<u>Last</u>	<u>Highest Counts</u>
Turkey Vulture	1,186	3/13	6/ 5	157 on 3/29; 117, 3/13; 116, 3/15
Black Vulture	15	3/15	5/14	6 on 3/15; 4 on 3/29
Sharp-shinned Hawk	5,153	3/13	5/30	787 on 4/29; 640, 4/28; 464, 4/27
Cooper's Hawk	224	3/13	5/26	37 on 4/28; 21, 4/29; 18, 4/21
Red-tailed Hawk	186	3/13	6/ 5	41 on 3/13; 26, 3/15; 16, 3/29
Red-shouldered Hawk	205	3/13	5/14	50 on 3/13; 45, 3/29; 32, 3/15
Broad-winged Hawk	1,479	4/ 8	6/16	171 on 5/25; 132, 4/27; 130, 4/29
Rough-legged Hawk	1	3/13		Dark phase
Bald Eagle	12	3/15	6/ 9	3 on 6/4; 2, 5/13; 4 ad., 8 im.
Northern Harrier	221	3/13	5/26	37 on 4/29; 21, 4/28; 20, 5/12
Osprey	509	3/27	6/ 5	53 on 5/7; 50, 5/12; 37, 5/3
Peregrine Falcon	5	3/15	5/10	1 also on 4/29, 5/3, & 5/5
Merlin	71	4/ 7	5/14	17 on 4/27; 13, 5/12; 10, 5/7
American Kestrel	551	3/13	5/21	59 on 4/2; 56, 3/27; 49, 4/15
Unidentified	10			
Total	9,828	3/13	6/16	60 days, 341 hours 164 hawks/day, 29 hawks/hour 5.7 hours/day of coverage 1.5 observers/day.

3-B Sandy Point—Annapolis Area

<u>Species</u>	<u>Total</u>	<u>First</u>	<u>Last</u>	<u>Highest Counts</u>
Turkey Vulture	81	3/ 1	5/ 9	24 on 3/11; 13 on 3/1 and 3/9
Sharp-shinned Hawk	21	3/ 2	5/ 9	4 on 3/4, 3 on 3/3, 3/11, 4/14
Cooper's Hawk	3	3/11	4/14	2 on 3/11
Red-tailed Hawk	41	2/25	3/19	32 on 3/11, 4 on 3/10, 2 on 3/14
Red-shouldered Hawk	2	3/ 4	3/11	
Broad-winged Hawk	6	4/14	5/ 2	4 on 4/14, 2 on 5/2
Northern Harrier	1	3/30		
Osprey	17	3/17	5/11	4 on 4/25 and 5/2
Peregrine Falcon	1	5/ 2		
Merlin	4	4/26	5/11	3 on 5/11
American Kestrel	45	2/25	5/11	13 on 3/11, 7 on 4/16, 5 on 3/10
Total	222	2/25	5/11	25 days, 39 hours

Reeder). In Kent County, Parks found a dark-phase Rough-legged Hawk on Mar. 10 and a light-phase bird on Mar. 15. Coble observed Rough-legs in Dorchester County at Taylors Island and Christ Rock in addition to Blackwater during the period Feb. 8 to Mar. 25. Late Rough-legs were reported from Frederick County where Wilkinson saw one hovering over a field along I-70 north of Middletown on Apr. 15, from Keedysville on Apr. 23 (Doyle), Calvert County at Fishing Creek Marsh through Apr. 25 (Kraus), Wicomico County on May 2 (Vaughn), and Blackwater (2 birds), May 2 (Armistead, et al.). An adult Golden Eagle was at Blackwater, Mar. 7 (Kleen, et al.),



Hal Wierenga manning the hawk lookout at Fort Smallwood Park, spring 1981
Photo by Rick Blom

and an immature was near Bellevue, Apr. 21 (Armistead). In Kent County three were observed on Mar. 22 and one on May 2. Another immature was reported on the latter date at Dan's Rock, Allegany Co. (Paulus). Sightings of Bald Eagles include an adult near Berlin, Mar. 9 (Armistead, Perry), an adult over Arnold, Anne Arundel Co., Mar. 29 (Klockner), an adult at Lilypons, Apr. 4 (D. Wallace), and 2 at Tanyard, Mar. 30 through May 27 (E. Engle). The Chesapeake Bay Bald Eagle Nesting Survey found 51 active nests in Maryland; these hatched 53 young, 41 of which were banded. This seems to be a normal reproductive rate. On May 9 in southern Dorchester County, 17 Northern Harriers were counted by Armistead, et al., certainly the center of the State's breeding population. Among the early Osprey reports were 2 in Talbot County, Mar. 7 (Reese), 1 at Eastern Neck, Mar. 9 (Parks), 1 at Patuxent NAS, Mar. 20 (Clark), 2 on Carroll Island, Mar. 21 (Blom, et al.), and 1 at Denton, Mar. 22 (O'Brian). Armistead and party counted 59 in southern Dorchester County on Mar. 28. A Peregrine Falcon was at Horn Pt. on the Choptank, Mar. 16 (Meritt). Other sightings may be referred to local release programs with one at Patuxent NAS, May 22 (Clark), and one in the Chesapeake Beach area throughout the season. Merlins were observed on Apr. 24 at Blackwater (Armistead) and Cedar Grove Beach (Coble) and on Apr. 25 at Fishing Creek Marsh (Kraus). The daily and seasonal Merlin counts at Ft. Smallwood are unprecedented for the spring (see Table 3-A).

Gallinaceous Birds. Ruffed Grouse were first heard drumming in Washington County on Apr. 4 (Boone) and in Garrett County, 3 at Friendsville, Apr. 12 (Pope). Armistead et al. counted 6 Ring-necked Pheasants in southern Dorchester County where released birds seem to be surviving rather well. Fran Pope counted 18 Wild Turkeys at Herrington Manor, Mar. 8, and Erika Wilson saw 4 at Hughes Hollow on Mar. 29. Al Geis and George and Carole Cleland observed a Wild Turkey on May 2 along the Patapsco River in Howard County between Henryton and Sykesville. There are no recent records for this part of the state and the origin of the bird is dubious.

Rails. At Deal Island WMA on May 6 Reese and Meritt counted 2 King Rails, 20 Virginia Rails, 20 Common Gallinules, and 11 American Coots. On May 16 Woody Martin banded a Virginia Rail at Patuxent WRC where breeding is a possibility. Soras were noted at Sandy Pt. on Apr. 20 (Wierenga) and at Lilypons on May 30 (D. Wallace). The latter may have attempted breeding. Another Sora was found dead on May 12 by John Wanuga on his lawn near Easton. Two Black Rails were in the Elliott Island marshes by Apr. 26 (T. R. Baptist, T. W. Burke), 1 at Truitt Landing, Worcester Co., May 2 (Ringler), 1 at Sandy Pt. on May 9 with 2 others on May 27 (Wierenga), and 1 on Tilghman Island, May 21 (Effinger). On the night of May 24-25 Armistead and Perry heard 9 Black Rails in the Elliott marshes. Interesting Common Gallinule records were of single birds in Washington County on Apr. 25 (Dowell), at Deep Creek Lake on May 2 (Pope), and near Pennyfield on the C & O Canal on May 9 and 10 (O'Brien, Wilson).

Shorebirds. The earliest American Oystercatchers were 8 at Ocean City on Mar. 9 and 2 at Hooper Island, Dorchester Co. on Mar. 28 (Armistead, et al.). Six Semipalmated Plovers were at Mountain Lake Park on May 16 (Pope). An early Piping Plover was at Ocean City on Apr. 12 (Hayes'). Black-bellied Plovers appeared in a few unlikely places with 2 at Patuxent NAS on May 9 (Willoughby), 1 at St. Marys City on May 15 (Willoughby), 8 in a field near Gortner on May 16 (Pope), 1 at Davis Airfield in Montgomery County on May 18 (Wierenga), 4 at Sandy Pt. on May 19 (Wierenga), and 1 at Back River on May 31 (Ringler, et al.). Fifteen Whimbrels flying north past Ocean City on Apr. 19 (D. Boone) were exceptionally early. An impressive 18 Upland Sandpipers were in the Belfast Valley, Baltimore Co., Apr. 25 (Kaestner, et al.), 1 was at Ft. Smallwood on Apr. 28 (Wierenga), and 1 south of Oakland, May 31 (Bonham). Three early Greater Yellowlegs were at Upper Marlboro, Mar. 8 (Blom, et al.). At Pomonkey Creek, Charles Co., there were 33 Greater and 16 Lesser Yellowlegs on Apr. 27 (Wilmot). A high of 325 Lessers was at Blackwater on Apr. 24 (Armistead, Reese). The highest count of Solitary Sandpipers reported was 50 at the north end of Loch Raven on May 12 (Kaestner), and a late bird was at Back River on May 29 (Ringler). The first Willets were at Deal Island on Apr. 3 (Debbie Mignogno) and at Ocean City on Apr. 12 (Hayes'). Wierenga observed Willets at Ft. Smallwood on May 5 and May 10 (1 each day) and on May 14 and May 30 (2 each day), and at Sandy Pt. he saw 2 on May 2 and 1 on May 28. Another Willet was at Patuxent NAS on May 28 (Clark). Very early Spotted Sandpipers were at Lilypons, Apr. 4 (D. Wallace), and Deep Creek Lake,

Apr. 5 (Pope). Armistead and Perry counted 73 Ruddy Turnstones at Ocean City on Mar. 9 and noted 3 near Bellevue on May 25. Another Ruddy Turnstone was at Sandy Pt., May 28 (Wierenga). Fran Pope found a pair of Wilson's Phalaropes at Mountain Lake Park, May 17, and a single female was at Back River, May 31 (Ringler, et al.). A female Northern Phalarope was at Lilypons, May 20 (D. Wallace), for an extraordinary inland record. Clark noted a brood of American Woodcock at Patuxent NAS, May 7. A Common Snipe along Kings Run Rd. on Mar. 19 (Pope) was quite early for Garrett County while high counts of 49 at Blackwater on Mar. 28 (Armistead, et al.) and 50 at Lilypons Mar. 29 (D. Wallace) were normal. Notable reports of Short-billed Dowitchers were 1 at Loch Raven, May 3 (Dixon), 1 at Sandy Pt., May 11 (Wierenga), 4 at Lilypons, May 20 (D. Wallace), and a surprising 40 at Mountain Lake Park, May 18 (Pope). Two Red Knots at Ocean City on May 1 (Ringler) tied the state arrival record and 2 at the North Beach marsh, May 10 (Kraus), and 3 at Sandy Pt., May 19 (Wierenga), were unusual on the bay. A late migrating Sanderling was at Sandy Pt. on May 28 (Wierenga). Western Sandpipers were noted in Calvert County, May 16 (Kraus), and at Back River, May 20 (Stasz). High counts of Least Sandpipers were 50 at Greensboro, Apr. 30 (Hewitt), 158 at the Choptank Bridge, Talbot Co., May 6 (Reese, Meritt), and 300 at Back River, May 16 (Blom, Ringler). Armistead found a White-rumped Sandpiper at Blackwater on the record-early date of Apr. 24 and 3 there on May 9. Another early White-rump was at Upper Marlboro, Apr. 30 (Conn). One was at Chesapeake Beach, May 16 (Kraus), and 3 at Back River, May 16-20 (Blom, et al.). High counts for Pectoral Sandpipers were 300 in Kent County, Apr. 8 (Parks) and 125 at Blackwater, Apr. 24 (Armistead, Reese). Three Dunlins were at Back River, May 16 (Blom, Ringler), and 17 at Lilypons, May 20 (D. Wallace). Stilt Sandpipers are rare east coast migrants in the spring so the number and locations of the following reports are remarkable. One was at Harmon Landing, Worcester Co., May 2 (Ringler), 6 in southern Dorchester County the same day and 3 in that area on the 9th (Armistead, et al.), 1 at the Choptank Bridge, Talbot Co., May 4 (Effinger, et al.), and 1 at Mountain Lake Park, May 16 (Pope). A Ruff was photographed at the north end of Loch Raven, Apr. 27 to May 4 (Dixon, et al.).

Jaegers, Gulls. Jon Janosik spotted 2 Parasitic Jaegers at Bozman, Talbot Co., on May 31. Single immature Glaucous Gulls were seen, May 5, at Black Marsh (Stasz), and Sandy Pt., May 9 (Wierenga). At the Rockville landfill Wierenga noted an immature Lesser Black-backed Gull on Mar. 13; then at Sandy Pt. a sub-adult on Apr. 23 and May 2 plus an adult there on Apr. 25 and 26. Other Lessers were seen at Chesapeake Beach, Mar. 14 (Kraus), and Eastern Neck, Mar. 22 (Parks). The Lesser at Ft. McHenry remained through Apr. 20 (Bielenberg). Approximately 150 Ring-billed Gulls were migrating northwest over Stasz's banding station near Stevenson on May 23. One Black-headed Gull was seen at Back River, Mar. 7 (Stasz, Ed Boyd) through Apr. 7 (Blom). Reese and Meritt estimated 800 Laughing Gulls at Deal Island, May 6. Reports of Bonaparte's Gulls from the mountains included one near Harper's Ferry in Washington County, Mar. 8 (Boone), 30 at Rocky Gap Lake, Apr. 4, and 5 there on the 15th (Wilkinson), 1 at Lilypons, Apr. 11 (Keedy), and in Garrett County, single late migrants south of Oakland and at Mountain Lake Park on May 16

(Pope). Two Little Gulls were at Back River on Apr. 7 (Blom) and 1 on the 9th (Stasz). Stasz also observed a Black-legged Kittiwake at Ocean City on Apr. 4.

Terns, Skimmer. Rather early were 13 Forster's Terns at Deal Island WMA on Mar. 29 (Armistead, et al.). A Royal Tern at Ocean City on Mar. 21 (J. B. Bazuin) is the earliest for the State. On the bay Royals were noted as follows: 10 at Hooper Island, May 2 (Armistead, et al.), 15 in Charles County, May 3 (Wilmot), 2 at Sandy Pt., May 9, and 7 there on the 11th (Wierenga), and 2 near Bellevue, May 30 (Armistead). Fran Pope watched 5 Caspian Terns calling and flying over Broadford Reservoir on Apr. 27. Black Terns were reported more often this year than usual with 7 at Ocean City, May 2 (Ringler), 1 at Deal Island, May 6 (Reese, Meritt), 1 at Sandy Pt., May 11 (Wierenga), 1 at Wilde Lake in Columbia, May 12 (Cowden), and 1 at Lilypons, May 20 (D. Wallace). The first Black Skimmer of the season was noted at Ocean City on Apr. 11 (Bonham).

Owls. Wierenga heard 2 migrant Barn Owls over Annapolis on Feb. 27 and 1 on Mar. 31. He and Bob Patterson placed a nesting box for Barn Owls in an abandoned silo near Davis Airfield on Mar. 9 and on Apr. 5 the box contained a full clutch of 4 eggs. The first hatched on Apr. 19 and the last on Apr. 30. All 4 young were still in the nest at the end of the period. Wilber Engle noted an adult Barn Owl with 8 eggs at Tanyard on May 2. This is a very large clutch for one pair. Wierenga found a Great Horned Owl nest with 3 young at the National Arboretum on Mar. 1. The last Long-eared Owls were seen at Gude's Nursery, Mar. 21 (O'Brien), and Piney Run, Mar. 22 (Ringler). A migrant Short-eared Owl rested briefly on the beach at Ft. Smallwood, Mar. 15, before being chased across the mouth of the Patapsco toward Sparrows Pt. by several gulls (Ringler). One Saw-whet Owl remained at the National Arboretum through Mar. 7 (Wierenga) and one was found dead along Rt. 33 near Sherwood, Talbot Co., Mar. 27 (Marshall).

Caprimulgids, Swifts, Woodpeckers. Wierenga flushed a Chuck-will's-widow from a nest with one egg at Sandy Pt. on May 9, the earliest egg date for the State. The first Whip-poor-wills of the spring were heard on Apr. 11 at Patuxent NAS (Clark), Federalsburg (Glime), and Denton (Knotts). Three Chimney Swifts passed Ft. Smallwood on the record early date of Mar. 27 (Wierenga). Also at the latter park migrant Pileated Woodpeckers were seen on Apr. 2, May 4, and May 10.

Flycatchers. An early Eastern Kingbird was near Easton on Apr. 12 (Kleen, et al.), and 2 late migrants passed Ft. Smallwood on May 30 (Wierenga). Exceptionally early Great Crested Flycatchers were found at Greensboro on Apr. 9 (Hewitt) and near Whaleyville on Apr. 18 (D. Boone). An Eastern Phoebe joined the host of early flycatchers by appearing at Laurel on Feb. 27 (Blom). Yellow-bellied Flycatchers were banded at Adventure Sanctuary near Potomac on May 18 and 26 (Donnald) and near Stevenson on May 30 (Stasz). An early Acadian Flycatcher was heard in Rock Creek Park, Montgomery Co., Apr. 26 (Wilson). Migrant Alder Flycatchers were seen and heard along Watts Branch in North Rockville on May 25 (O'Brien) and at Masonville on May 31 (Kaestner). Stasz

banded an early Least Flycatcher near Stevenson on Apr. 30. An Eastern Pewee at Blackwater on Apr. 24 (Armistead, Reese) was also early. Olive-sided Flycatchers were found near Stevenson on May 24 (David Holmes, Dixon), and along Watts Branch on May 25 (O'Brien).

Swallows. Two Tree Swallows were at Hughes Hollow on Mar. 1 (Wilson) and there was a March high of 200 at Ft. Smallwood on the 13th (Wierenga). Paulus observed an early Rough-winged Swallow perched over the C & O Canal at North Branch, Allegany Co., Mar. 31. An early Barn Swallow was at Linkwood, Dorchester Co., Mar. 22 (J. B. Bazuin). An early Cliff Swallow flew over Cape St. Clair, Anne Arundel Co., Apr. 9 (Bob Augustine), and one near Bellevue, Apr. 19 (Armistead), was rare on the Eastern Shore. Fifteen Purple Martins at Ft. Smallwood, Mar. 13 (Wierenga), conclude the list of early swallows.

Corvids, Chickadees. Blom and Wierenga estimated 25,000 Blue Jays passed Ft. Smallwood during three days at the end of April. The last migrating Blue Jay at Ft. McHenry passed on May 21 (Bielenberg). Northern Ravens were widely reported with 1 near Oakland soaring with a Red-tailed Hawk and 1 at Swallow Falls, both on Mar. 15, 1 near Mountain Lake Park, 2 along Snaggy Mountain Road (all by Fran Pope), a pair at Rocky Gap in March and April with fledged young on May 2 (Wilkinson), and 3 at Gambrill State Park, May 23 (Hayes'). A Fish Crow at Rocky Gap, May 2 (Wilkinson), was unusual in the mountains. The last report of lowland Black-capped Chickadees was of 2 at Lilypons on Mar. 15 (D. Wallace). The Doyles found a Carolina Chickadee nest with 6 eggs in a bluebird box at Boonsboro, Apr. 21.

Creeper, Wrens. A Brown Creeper was singing along the Youghiogheny River, Apr. 6 (Thayer), and a late migrant was at Denton, May 3 (Knotts). A House Wren on Carroll Island, Mar. 21 (Ringler, et al.), may have been an early migrant or perhaps wintered. The only Bewick's Wren found this year was near Stevenson, May 16 (Stasz). A Carolina Wren along the Yough on Apr. 13 (Thayer) is evidence of the comeback being staged by that species in the mountains. Ethel Engle found a Marsh Wren at Tanyard, Apr. 29. Sedge Wrens were more plentiful than in any recent year with 1 at Irish Grove, Apr. 19 (D. Boone), 1 at Deal Island WMA, May 6 (Reese, Meritt), 2 at Black Marsh, May 10 (Kaestner), and 2 in the Elliott Island marshes from May 9 onward (Armistead, et al.).

Thrushes, Shrikes, Vireos. An early Wood Thrush was at Seneca on Apr. 17 (Wilkinson). Wierenga's best night for thrush listening was in the morning on May 24 when he heard about 100 Swainson's Thrushes and 2 Veeries passing over Annapolis. A male Eastern Bluebird arrived at a nest box in Oakland, Mar. 4 (Pope). The only Loggerhead Shrikes reported this spring were at Denton, Mar. 15 (E. Engle), Easton, Mar. 24 (Allen), Boonsboro, Mar. 29 (Doyle), and near Piney Grove Church, Baltimore Co., May 31 (Stasz). Dan Boone counted about 20 Yellow-throated Vireos in Worcester County, Apr. 18. Early Solitary Vireos were on Sideling Hill, Washington Co., Apr. 4 (Boone), Pocomoke Swamp, Apr. 5 (Mignogno), and along the Yough, Apr. 9 (Thayer). Doyle reported a Philadelphia Vireo along Beaver Creek, Washington Co., May 22. An early Warbling Vireo was

at Lilypons on Apr. 18 (Hayes') and David Wallace counted 13 along the C & O Canal in Frederick Co., May 31.

Warblers. A Black-and-white Warbler along the Yough on Apr. 11 (Thayer) is the earliest ever for Garrett County. On a canoe trip from Porter's Crossing to Whiton Crossing in Worcester County Dan Boone estimated 200 Prothonotary Warblers on Apr. 18. Early Worm-eating Warblers were in Kent County on Apr. 12 (Parks) and Talbot County on Apr. 19 (Reese). Armistead and Reese counted 8 of this uncommon species at Blackwater on Apr. 24. A Golden-winged Warbler that remained near Stevenson, Apr. 30 through May 4, was banded on the 3rd (Stasz). Another Golden-wing was in Calvert County, May 16 (Kraus). Dan Boone found a record-early Blue-winged Warbler in Hickory Swamp, Worcester Co., on Apr. 19 and a late singing male in Bear Swamp, May 24. Michael O'Brien found a Brewster's Warbler at Pennyfield, Apr. 25, Danny Bystrak banded a male Brewster's at Patuxent WRC, Apr. 30, and a female on May 1, and Dan Boone found another Brewster's at Indian Springs, May 17. An early Nashville Warbler was in Laurel on Apr. 24 (Blom, Reeder), and an early Northern Parula Warbler along Dividing Creek on Apr. 8 (Mignogno). Reese and Meritt saw and heard a total of 35 Yellow Warblers at Deal Island WMA, May 6. A Cerulean Warbler at Windyhill, Talbot Co., on May 1 (Meritt) was rare on the Eastern Shore, as was one at Patuxent NAS, May 9 (Nistico, et al.). Another Cerulean was seen nest-building at Phoenix on the 9th (Stasz). Some interesting locations for Yellow-throated Warblers were 1 at Big Pool, Washington Co., Apr. 11 (Warfield), 1 at Ft. McHenry, Apr. 8 (Bielenberg), and 2 at Rocky Gap, May 2 (Wilkinson). A male Prairie Warbler near Friendsville on Apr. 12 (Pope) was extremely early for the mountains. A Palm Warbler in Washington County on May 16 (Boone) was very late. It was a very good year for Northern Waterthrushes at Adventure Sanctuary where Margaret Donnal and crew banded their first of 91 for the season on Apr. 20. Another Northern Waterthrush was at Ft. Frederick State Park, Apr. 24 (Boone). The O'Briens found 3 Mourning Warblers along Watts Branch, Montgomery Co., May 23. Other Mourning Warblers were seen in Anne Arundel County, May 24, at Arnold (Klockner) and near the Annapolis Reservoir (Mumford). Reese and Meritt counted 18 Yellow-breasted Chats at Deal Island WMA, May 6.

Icterids, Tanagers. Thirty Bobolinks were along New Design Road near Buckeystown, May 14 (D. Wallace). Paul Leifer found an Orchard Oriole nest with 1 egg on May 13 in Howard County. Armistead, et al. counted 139 Boat-tailed Grackles in southern Dorchester County, Mar. 28. Fran Pope found a pair of Summer Tanagers south of Oakland on May 2 with the male still visible through May 25. This species is quite rare above the Coastal Plain and all the more so in Garrett County.

Finches. An early Rose-breasted Grosbeak was seen along the Yough on Apr. 24 (Thayer). Also early were Indigo Buntings in Towson on Apr. 18 (Betty Iber) and at Blackwater on Apr. 24 (Armistead, Reese). The higher counts of Evening Grosbeaks were 30 at Fran Pope's feeder in Mountain Lake Park, Apr. 8, and 44 at Ft. Smallwood, Apr. 27 (Wierenga). This species lingered later than usual into May with 3 at Deal Island on the 6th (Reese, Meritt), 1 at Ft. Smallwood on the 13th (Wierenga), in

Kent County on the 14th (Parks), and at Lilypons on the 15th (D. Wallace). The Hayes' found a Purple Finch at Beltsville on May 20. House Finch counts continue to increase with 256 at Ocean City, Mar. 9 (Armistead, Perry), 50 at Mountain Lake Park, Apr. 8 (Pope), 50 at Tanyard, Mar. 1 (E. Engle), and 20 at Greensboro, Apr. 7 (Hewitt). Pine Siskins also remained unusually late this year with 4 in St. Marys City on May 9 (Evelynne Merritt), 1 at St. Michaels on May 15 (Reese), at Beltsville on May 20 (Hayes'), Bear Swamp on May 24 (D. Boone), and at Arnold on May 30 (Klockner).

Sparrows, Bunting. A Savannah Sparrow in Rock Creek Park, Mar. 8 (Wilson), may have overwintered. Others at Lilypons, Mar. 29 (D. Wallace), and near Cumberland, Mar. 31 (Wilkinson), were certainly early migrants. Late Savannahs were 2 at Deal Island WMA on May 9 (Ringler, et al.), 1 on Carroll Island, May 16 (Ringler, Blom), and 2 in Kent County, May 20 (Parks). Two Grasshopper Sparrows along New Design Road in southern Frederick County were slightly early, Mar. 29 (D. Wallace). There were 4 Henslow's Sparrows at Elliott Island, May 9 (Armistead, et al.). Two Sharp-tailed Sparrows and 20 Seaside Sparrows were at Sandy Pt., Apr. 20 (Wierenga). These are not breeders there and the last Seaside was seen on May 9. Other Seaside Sparrows were at Ft. Smallwood, Apr. 17 (Wierenga), at Ft. McHenry, Apr. 20 (Bielenberg), and at North Beach, Apr. 20 (Kraus). Reese and Meritt estimated 50+ Seaside Sparrows at Deal Island WMA on May 6. Late Northern Juncos were at Denton, May 4 (Knotts), and at Bozman, Talbot Co., May 15 (fide Reese). Two Chipping Sparrows at a feeder in Arnold, Mar. 2 (Klockner), were unusual for winter. Another at Denton, Mar. 16 (Knotts), may have been a migrant or wintering bird. There were several notable late White-crowned Sparrows: 1 at West Ocean City, May 10 (Jim Cheevers, et al.), 1 in Washington County, May 19 (Wingers), 1 at Mountain Lake Park, May 17 (Pope), 2 at Ft. McHenry, May 20 (Bielenberg), and 1 near Stevenson, May 22 (Stasz). A late White-throated Sparrow was in Arnold, May 24 (Klockner). Late Fox Sparrows were at Williamsport, Washington Co., Apr. 12 (Mallonee), and banded at Adventure, Apr. 15 (Donnald). Lincoln's Sparrows staged an unusually early migration into Maryland this spring. The first of 16 banded at Adventure for the season was an arrival record on Apr. 22 (Donnald). Danny Bystrak banded one at Patuxent WRC on Apr. 30. Another was along the Yough May 1-4 and banded on the 3rd (Thayer), and a second bird was banded there on the 22nd. Ludwig found single Lincoln's Sparrows at Frostburg on May 4 and 5. Kraus found one in Calvert County, May 11-14. Two widely separated Swamp Sparrows may have been evidence of breeding. One was in Washington County, May 17 (Boone), and the other in Calvert County through May 31 (Kraus). The possibility of the former being a late migrant cannot be ruled out. The last Snow Bunting was at Sandy Pt., Mar. 6 (Wierenga).

Addendum - Omitted from the fall records for Vol. 37, No. 1 was a Northern Harrier near Madonna Aug. 31, 1980, (Kirkwood) the earliest fall record for Harford County.

TALE OF A LATE CLIFF SWALLOW NEST IN A BARN

Nancy D. Rowe

"One swallow maketh not summer,"¹ the old English adage warns; but one swallow family made our 1980 summer more interesting.

On July 13 we were showing our grandchildren the many Barn Swallow (*Hirundo rustica*) nests clinging to the vertical sides of the old hand-hewn beams in the lower level of the bank barn when suddenly we spied a different mud nest, not cup-shaped but globular. It was, of course, none other than that of a Cliff Swallow (*Petrochelidon pyrrhonota*); and, as if to confirm the fact, the buffy-foreheaded occupant peered out through the bottleneck entrance.

However long she had been incubating the eggs was uncertain and could not be estimated until the nesting cycle was completed. My visits to the barn had been (and would be) irregular, but I knew the nest had not been there long. It was quite dry and was "roofed-over," indicating it might be several days old, since it often happens that a female will lay her eggs before the top is complete.² In any case, the eggs seemed to have been laid rather late in the season, according to Robbins and Bystrak³ whose "latest viable egg date" record for Maryland is June 24.

Two other aspects seemed unusual. 1) The nest was not under the eaves on the outside of the building, as one would have expected, but on the side of a beam within the structure - perhaps its placement just three feet from the open side of the barn simulated an eave location to this pair of swallows. 2) Cliff Swallows are considered colonial nesters, yet this was the only nest of its kind in the barn or surrounding area.

The area is Broadmead, a recently constructed retirement community north of Cockeysville, in Baltimore County, Maryland. The barn, silo and other outbuildings, remaining from the former estate and used now only for storage of equipment, are situated along the edge of Western Run's broad, open flood plain and about 100 yards from the meandering stream.

For many years it had been a fine location for barn swallows, but in the fall of 1979 an unenlightened workman destroyed every nest in sight. Come spring, 1980, however, the birds returned and built 54 new nests from scratch - or, should I say, mud. Little did they realize that the natural resources they would find would be superior, for heavy rains had coincided with post-construction pre-landscaping period of Broadmead to render the land more "mud" than "mead." The many resulting puddles and heavy clay soil met the swallows' requirements perfectly. A storm water collecting basin 200 yards from the barn offered additional mud and increased the generous supply of insects already in abundance above the flood plain meadow.

Like the Barn Swallow's open nest, the Cliff Swallow's gourd-shaped nest is composed of hundreds of mud pellets stuck "against the wall, as

careful as ever a sailor, about to spin a yarn, deposited his chew on the mantlepiece."² They must be of the proper composition and consistency to adhere to the beam and to each other, and yet not be so dry as to crumble, nor so moist and heavy as to cause the nest to sag or fall. High humidity during construction increases the latter possibility.

Barn Swallows apply mud and grasses in seemingly alternating layers, whereas Cliff Swallows may mix only a little plant fiber or hair into theirs. (The few horse hairs in the Broadmead nest looked suspiciously like the hair we had placed on a tree for the orioles.) Both species' nests are constructed from bottom to top, pellet by pellet, row upon row. It has been estimated that over ⁴1200 mud-carrying trips are required in building one Barn Swallow nest.

Perhaps to help discourage intruders, the Broadmead Barn Swallows built their nests 1 1/2 inches from the ceiling, allowing just enough space to wing in and out themselves. Cliff Swallows, for the same purpose, are thought to extend the side entrance hole into a slightly down-curved neck 5 to 6 inches long, especially where House Sparrows (*Passer domesticus*) are present. Despite this feature, usurpation and destruction of Cliff Swallow nests by this introduced species are said to be one of the major causes of the decline in Cliff Swallow populations in this country.² At any rate, though there were vestiges of nests the numerous House Sparrows had begun atop the beams, the sparrows apparently nested elsewhere.

Determination of the exact "latest viable egg date" of the Broadmead Cliff Swallows is not possible, but a close approximation is: by calculating back from the date the young left the nest, using the most recent information available (to me) regarding the length of incubation and nestling periods of the Cliff Swallow. According to Colin Harrison, incubation takes 16 days and the nestling stage lasts 23 days.

RECORDS OF MY OBSERVATIONS

July 13	Mud construction complete; adult within.
July 17	Adult within.
July 27	Adult(s) carrying food to nestlings.
August 13	Ditto
August 17	Ditto
August 18	Young probably left nest; my opinion. No visit made.
August 19	Nest empty (early morning).

CALCULATION OF "LATEST VIABLE EGG DATE"

Derived by deducting nestling and incubation periods
from the date the young left the nest.

	<u>Probable</u>	<u>Possible</u>
Actual date(s) young left nest	August 18	August 19
Minus 23-day nestling period		
Date eggs would have hatched	July 26	July 27
Minus 16-day incubation period		
Date last egg would have been laid	July 10	July 11

One can safely conclude, I believe, from this analysis that the latest viable egg date of this clutch exceeds the Robbins and Bystrak date of June 24 by about 16 or 17 days.

Two postscripts to this account: all Barn Swallows had left their nests by August 21 and the Cliff Swallow nest had crashed to the floor by September 20, but not before I snapped a picture of it. (See cover.)

As I write this, the Cliff Swallows are wintering deep in South America. Will they return and rebuild their nest? Might the young also return to start a "colony"? I'll let you know.

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Broadmead, 12801 York Rd., Cockeysville, Md. 21030

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